# Zibra Liquids Free Changelog

### Version 1.5.2

- Improved simulation performance
- Documented public C# interface and added API Reference
- Added changelog document to the package
- Added option to disable raymarching
- Added anonymous plugin usage statistics collection
- Fixed warning/requirement to set Reflection probe and Custom light to the liquid in case of Unity Render
- Fixed HDRP rendering, in case resolution was changed and camera textures don't match camera resolution
- Fixed capsule SDF gizmo not matching actual SDF
- Fixed errors when camera preview is open
- Fixed Welcome Screen error when automatically opening on package import
- Fixed rendering in case of URP+Vulkan
- Fixed floating crash in case of VR+D3D11
- Minor UI improvements

#### Version 1.5.0

- Added OpenGL and Vulkan support on Windows
- Now manipulator/colliders form is defined by separate Zibra Analytic SDF (manipulators can only use Analytic SDF)
  - Manipulators can now use any Analytic SDF shapes and not restricted to just boxes
- · Liquid is now rendered in Scene view on URP
- Improved Refraction near the edge of the screen
- Updated sample scenes
- .NET assembly now has plugin's version
- Visualize SDF now works in any render mode
- Removed "Particle Render" mode
- Fixed liquid rendering in case DLSS enabled
- Fixed liquid not getting rendered if you disabled "Run Simulation" and applied Initial State
- Fixed rendering in cases when simulation is paused

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- Fixed native plugin logger crash
- Miscellaneous QOL improvements

#### Version 1.4.7

- Fixed liquid only taking part of the screen when using downscale
- Fixed refraction in case of Unity Render being used simultaneously with downscale

#### Version 1.4.6

- Added new liquid renderer "Unity Render" that has:
  - VR support
  - o Can be used with normal Unity Materials
    - Supports orthographic camera
    - Can be draw as opaque and drop shadows
- Fixed rendering on URP in case URPs render scale wasn't set to 1.0
- Replaced Mesh Render's RefractionQuality option with RayMarchingResolutionDownscale option. Now you can control refraction quality/performance more finely.
- Some options are now hidden, when selected liquid renderer doesn't used them.

#### Version 1.4.5

• Fixed visual artifacts in mesh render that resulted in parts of liquid being black

#### Version 1.4.4

- Added new liquid renderer "Mesh Render" that has:
  - Better performance
  - Underwater rendering option
  - Better visuals
  - Orthographic camera support
- Added DX12 support
- Improved performance
- Added option to change liquid render injection point on URP/SRP
- Added button to export diagnostic info
- Added visualize SDF option to see visualize Neural/Analytic liquid colliders (only works when particle render is selected)
- Added warning when depth buffer is not enabled in URP options
- Added Additional JFA Iterations parameter to reduce pixelated liquid issues in particle render
- Changed emitter logic, so when changing simulation speed, emitting speed changes accordingly
- Fixed bug when liquid changes are not always saved in the editor

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- Fixed liquid bug that liquid doesn't work in Windows editor when macOS is selected as target platform
- Fixed crash on Metal that was happening under certain circumstances (e.g. when Terrain is present on the scene)
- Fixed liquid sometimes stutters on DX11

#### Version 1.4.3

- Fixed camera culling mask not hiding liquid
- Fixed HDRP render component missing in some cases
- Removed Visual C++ redistributable dependency on Windows
- Updated Zibra Liquid icon

### Version 1.4.2

• Fixed rendering on URP in case MSAA is disabled

#### Version 1.4.0

- Updated object icons.
- Updated sample scene.
- Added fixed time step option.
- Added macOS arm64 native support.
- Added UWP support.
- Added support for Unity 2021.2.
- Added downscale option to decrease liquid render resolution.
- Added inverse collider option.
- Added custom material selection for liquid.
- Added new analytical colliders and gizmos.
- Added force fields.
- Added error messages for common errors.
- Added warning when "Liquid URP Render Component" is not added to render features on URP.
- Automatically adding emitter to newly created liquid.
- Fixed force interaction on the edge of simulation volume.
- Fixed rendering of multiple instances of liquid.
- Fixed Unity warnings.
- Fixed case when URP/HDRP is imported but unused.
- Fixed Editor UI update issues.
- Fixed crash after deleting manipulators colliders from scene and not opening liquid editor.
- Fixed macOS crash when having too many voxel colliders.
- Fixed macOS crash when we have 0 manipulators.
- Fixed bug with multi camera in HDRP.

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- Fixed bug with URP depth.
- Implemented proper container movement.
- Implemented multi object editing.
- Implemented rotating liquid emitter without additional transforms.
- Improved performance when using multiple liquid instances.
- Moved liquid emitter initial speed to separate parameter.
- Parameters that can't be changed on "live" liquid are now disabled instead of hidden.
- Limited maximum gravity.
- Renamed some liquid properties
- Fixed typos.
- Fixed various C# bugs.
- Other minor fixes.

### Version 1.3.4

• Fixed macOS .bundle file signature