Rendering Order

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The order in which the rendering occurs in SceneComposer follows the next rules:

1. All the widgets from the active scene get updated;
2. All the 2D cameras are rendered: all the cameras are sorted by following the sequence number; all the cameras are rendered on associated surfaces;
3. All the 3D cameras are rendered: all the cameras are sorted by following the sequence number; all the cameras are rendered on associated surfaces;
4. Active camera and all reflection cameras (if existing) are rendered on Scene Editor panel: a) The active camera is added on a list of cameras; b) On the same list all the "reflection camera" children type are added; c) The list is sorted by following the sequence number; d) The cameras from the list are rendered on Scene Editor panel.

Buffer Swapping Rules (available for both 2D and 3D)

Usually, the last camera (based on the sequence number) that is rendered on a surface performs a buffer swap (being the latest camera, the frame is completely updated so it can be displayed).

Clearing rules:

- 2D: a) Scissoring not active: cameras clear the surface on the region which is indicated by the viewport b) Scissoring active: cameras clear the surface on the region which is indicated by the scissoring rectangle
- 3D: the cameras clear the surfaces inside the region created by the scissor box (when scissoring is enabled). By default, the scissor box is equivalent with the whole surface (-0, 0, 1, 1). In conformity with OpenGL specifications, the viewport does not affect the clearing region (this is a driver dependent rule).

Revision #3
Created 2023-02-13 05:40:12 UTC by Kanai Tomoaki
Updated 2025-01-20 23:32:06 UTC by Kanai Tomoaki