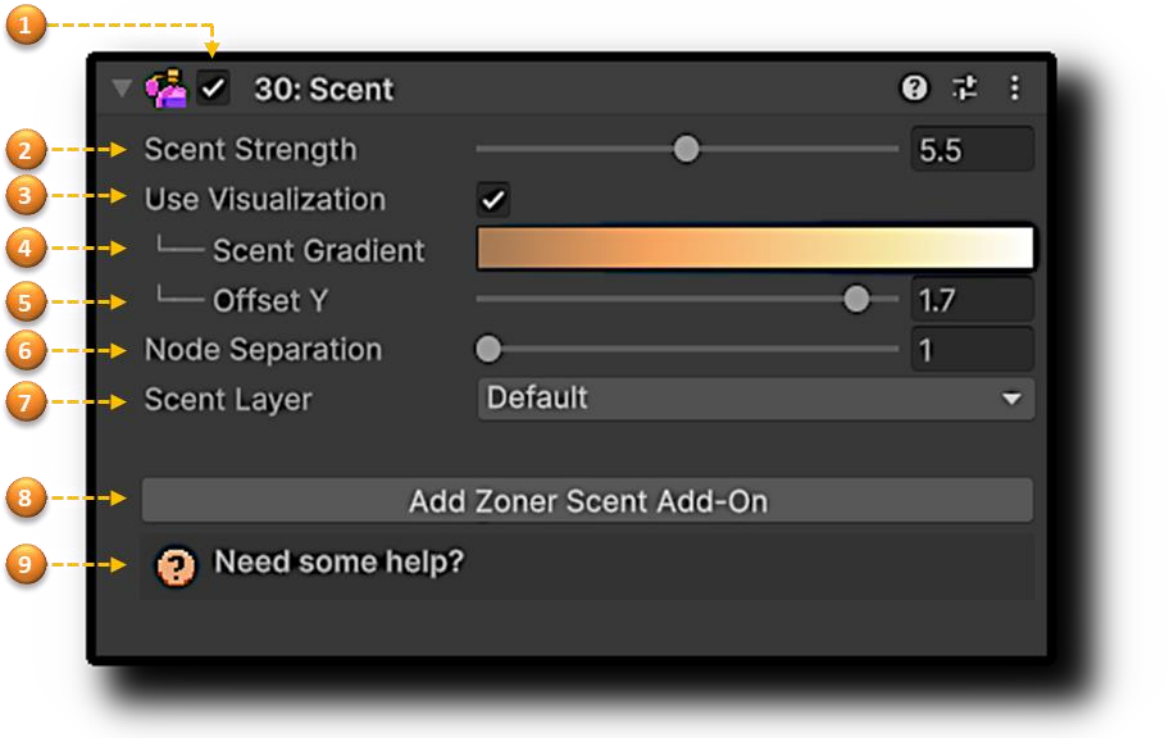
SCENT COMPONENT

The Scent Component gives your actors the ability to **leave a smell trail through the world**, just like footprints in the air. As characters move, they emit Scent Nodes—lightweight markers that enemies with smell-based senses can track, follow, or investigate. Whether it's a guard dog tracing a player's path or a creature reacting to fresh scent changes, this system makes scent a dynamic, gameplay-relevant signal rather than a visual effect. Everything runs automatically in the background, so designers can focus on gameplay while the system handles emission, node spacing, pooling, and detection.

Scent Component Inspector Tab



1	Enable / Disable	When disabled, the Scent Component stops emitting new Scent Nodes.
2	Scent Strength	Sets the base scent intensity, determining how long each Scent Node remains active.
3	Use Visualization	Enables or disables visual representation of the scent trail.
4	Scent Gradient	Defines the color gradient used to visualize the scent trail.
5	Offset Y	Adjusts the vertical offset of the scent visualization.
6	Node Separation	Controls the minimum distance between spawned Scent Nodes. Lower values create a denser trail with more nodes.
7	Scent Layer	Assigns the Unity layer used for Scent Nodes. Must match the

		layer your smell-based Senses are configured to detect.
8	Add Zoner Scent Add-On	Enables the Zoner Scent Add-On.
9	'Need some help?'	Displays Help Information.

Scent Strength

Scent Strength determines how long a scent trail remains active in the world.

A higher value makes each Scent Node persist longer before fading, allowing smell-based AI to follow the actor's trail further back in time. A lower value causes the trail to decay quickly, meaning only very recent nodes will be detectable. Scent Strength does not influence detection distance—that is controlled by the Smell Sense component.

Node Separation

Node Separation controls how frequently Scent Nodes are dropped while the actor moves.

A new node is created only after the actor has traveled at least this distance from the previous node. Smaller values produce a dense, detailed scent trail, while larger values create a sparse trail that is harder for smell-based AI to follow.

Visualization

Visualization is an optional, graphical representation of the scent trail your actor leaves behind. It is rendered using a particle-based visual effect and remains completely separate from gameplay logic. The scent system functions fully without it—enemies can still smell, track, and follow the scent trail even when no visual effect is shown.

However, some games benefit from giving players visible feedback that they are emitting scent. Without a visual cue, players may feel confused or "cheated" when an enemy follows them by smell, especially if the mechanic isn't immediately obvious. Enabling Visualization helps communicate how the scent system works, allowing players to see their trail, understand why AI reacts the way it does, and learn how scent influences stealth or pursuit.

Scent Layer

Scent Layer specifies which Unity layer each Scent Node is placed on when it is created.

Using a dedicated layer is optional, but highly recommended—especially if you want to keep scent nodes separate from regular physics, raycasts, or triggers. This helps maintain a clean project setup and prevents unwanted interactions with other systems.

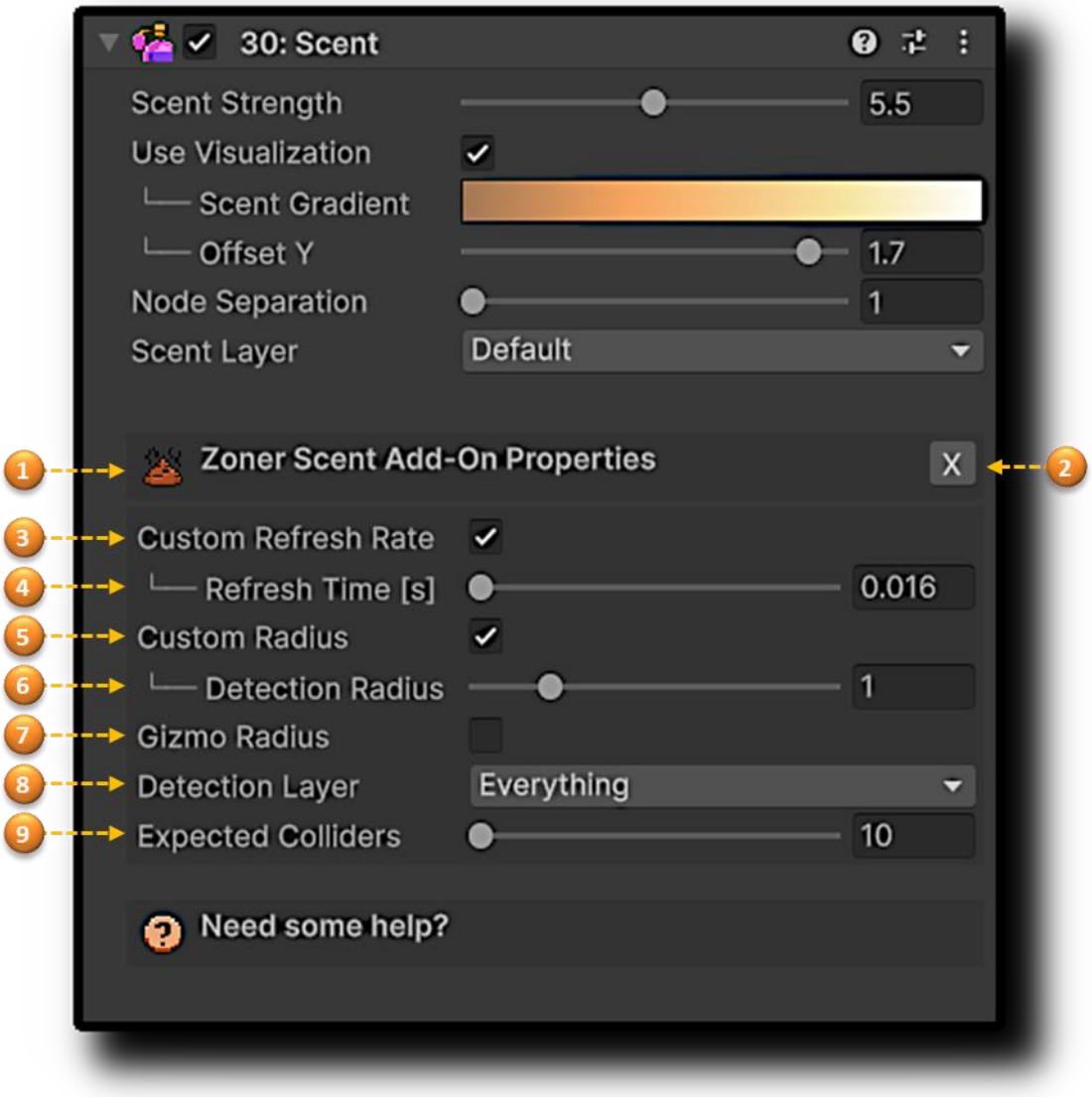
If you decide to place Scent Nodes on their own layer, remember that smell-based Senses must also be configured to detect that same layer. If the layers do not match, the AI will not be able to "smell" or interact with the scent trail at all. Setting both sides to the same layer ensures the scent trail is fully visible to your smell-tracking actors.

Zooner AddOn

The Zoner Scent Add-On expands the Scent Component by allowing the environment to actively influence an actor's smell trail. As the actor moves through the world, the system continuously checks for **Scent Zone Distractors**—special environmental volumes that modify how scent behaves. Depending on the zone, the scent trail can be weakened, intensified, distorted, or even completely blocked.

This transforms scent from a simple trail into a dynamic environmental mechanic: water or rain zones may wash the scent away, tall grass could trap the smell and make it linger longer, while chemical or magical areas might amplify the trail dramatically. All interactions are handled automatically through the Distractor system, giving designers powerful environmental control without requiring custom coding.

Zooner AddOn Inspector Tab



1	Zoner Scent Add-On Properties	Opens or closes the Zoner Scent Add-On settings.
2	X	Disables the Zoner Scent Add-On.
3	Custom Refresh Rate	When enabled, allows customizing how often the scent system checks the area for ScentZoneDistractors. When disabled, checks occur every frame.
4	Refresh Time [s]	Update interval.
5	Custom Radius	When enabled, allows setting a custom radius for detecting ScentZoneDistractors. When disabled, the radius is calculated automatically from the actor's colliders.
6	Detection Radius	Defines the radius used to detect nearby ScentZoneDistractors.
7	Gizmo Radius	Draws the detection radius in the Scene View (requires Gizmos enabled).

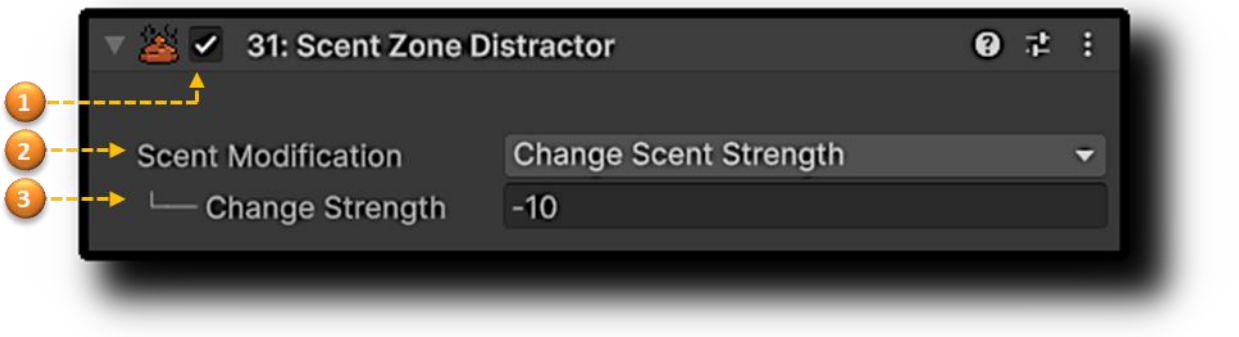
8	Detection Layer	Which layers contain ScentZoneDistractor objects. Only colliders on these layers can modify or block scent.
9	Expected Colliders	Sets the expected number of colliders inside the detection radius. Use a small value in low-density areas, and a higher value when many colliders are present.

Scent Zone Distractors

ScentZoneDistractor modifies the scent emitted by nearby **Scent** components by either changing their strength or blocking their emission entirely. It stores the designer-defined settings internally, but for gameplay consistency it becomes inert when disabled: ScentModyfication automatically behaves as **None**, and ScentStrengthChange always reports **0**, ensuring that deactivated distractors have no influence on scent systems while still preserving their configured values for when they are re-enabled.

This component requires a Collider to define the scent-influence zone. The collider acts as the physical area in which passing characters or objects are affected by the distractor's scent modification. For most use cases, a **Trigger Collider** is recommended—this allows agents to walk through the zone freely while the system detects their presence without physical collisions. You may place the collider on this object or any child object, and any collider shape is supported depending on the volume you want to represent.

Scent Zone Distractors Inspector Tab



1	Enable	Allows enabling Scent Zone Distractor Component, when disabled returned Scent Modification will be None, and Scent Change Strength will equal 0;
2	Scent Modification	Choose 'None' to disable effect, 'Change Scent Strength' to increase/decrease scent strength, or 'Block Scent Emission' to stop scent entirely.
3	Change Strength	Set how much this zone modifies scent strength.