## **Brute Force GI**

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## **Overview**

The Brute Force method for computing global illumination recomputes the GI values for every single shaded point separately and independently from other points. This method is very accurate, especially if you have many small details in the scene.

Using Brute Force as both the primary and secondary engine is sometimes the best solution for exterior renderings. For other types of renderings, it can be faster to use a less computationally-intensive method (such as the Light cache) for approximating secondary GI bounces.

The following diagram shows the way rays are traced when using the Brute Force method. When the **Engine** for **Primary bounces** is set to **Brute Force**, the first rays (shown as black lines in the diagram) are traced from the camera into the scene in order to determine the points for which GI is going to be calculated. When a ray hits a surface the primary bounces (red) are traced; the quantity of these rays is dependent on the **Subdivs** parameter setting. When the **Engine** for **Secondary bounces** is set to **Brute Force**, the secondary bounce rays (blue) are traced. In this case a single ray is traced for each bounce, and the number of bounces depends on the **Depth** paramet er.



## Notes

 For more information about parameters and settings for Brute Force GI, please see the Brute Force Settings page under the Render Settings | GI tab section.