NVIDIA Iray Server is a software solution that provides distributed Iray rendering across networked machines.

It uses a common installation and license to deliver traditional offline batch rendering and interactive rendering to all NVIDIA Iray plug-in products, without the need to install any other application. All machines running Iray Server coordinate with each other to reduce the time needed to render an offline image. This allows a render farm to process poster-size images in a fraction of the time of a single machine. A central management console provides flexible control over submitted jobs with the ability to adjust and rerun past jobs. Iray Server also speeds up your creative process by bridging to your Iray application and streaming back the rendered results as you manipulate your scene. Now even a modest laptop can interact with Iray at the speed of your most powerful machine housing professional GPUs.

**SYSTEM REQUIREMENTS**

<table>
<thead>
<tr>
<th>SOFTWARE</th>
<th>Iray client - Iray for Maya, Iray for 3ds Max, Iray for Rhino, Iray for Cinema 4D, DAZ Studio or Siemens NX</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATING SYSTEM</td>
<td>64-bit Windows or 64-bit Linux</td>
</tr>
<tr>
<td>QUEUED RENDERING</td>
<td>Locally networked machines with x86 CPUs and/or CUDA-capable GPUs of Fermi generation or later</td>
</tr>
<tr>
<td>INTERACTIVE STREAMING</td>
<td>Requires NVIDIA Quadro®, Tesla®, and/or Grid® GPUs</td>
</tr>
<tr>
<td>NETWORKING</td>
<td>Streaming: 100Mbps Queuing: Queuing 10Mbps Multicast or TCP/IP for distributed rendering</td>
</tr>
</tbody>
</table>

**IRAY PERFORMANCE SCALING WITH QUADRO DESKTOP GPUs**

Tests run on a workstation with Intel Xeon E5-2647 V3, 14 cores 2.6GHz, 32GB RAM, running Win 7 64-bit SP1 and driver version 375.86. Performance testing completed with internal NVIDIA Iray tests at HD resolution.

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NVIDIA Iray Server is the ultimate distributed rendering solution.

Image courtesy of Vincent Gault, Allegorithmic
PERFORMANCE SCALING FOR EFFICIENT CLUSTER RENDERING

Slash rendering times by using a cluster of machines for queued rendering. The more complicated the rendering, the greater the benefit from adding more machines. Each machine in a cluster always contributes its maximum capability, making it easy to maintain efficiency even when machines vary in their individual rendering speed.

IRAY SERVER – REDUCING RENDER TIMES

IRAY SERVER – SCALING EFFICIENCY

IRAY SERVER FEATURES

Rendering
Runs on Windows or Linux, independent of submitting applications
Uses all supported GPUs and CPUs within the machine
Features sophisticated cache management that minimizes submission times
Same installation supports distributed rendering between machines or interactive streaming from a single machine
Iray Photoreal and Iray Interactive rendering modes supported
Single pass stereo with control over eye separation and output composition
Multiple Iray versions supported, enabling a single installation to serve differing Iray client versions

Queuing
Reliable distributed rendering solution for all NVIDIA Iray products
Flexible render queue management system with user accounts
Super-fast job submission that quickly frees host application
Fastest possible Iray rendering, free of any host application overhead
Incremental updates for highly efficient animation rendering
Automatic cluster configuration between Iray Server machines
Ability to edit past jobs to adjust rendering options without resubmission, such as resolution, format, stop criteria, Buffers, and Light Path Expressions
Job progress reporting and remote image result viewing

Streaming
Interactive streaming to Iray client application from a remotely connected machine
Streaming behavior that’s identical to local rendering with minimal latency
Incremental updates that minimize transmission for fluid editing workflows
Streaming quality control of H.264 video or sequential image formats for balancing quality with bandwidth

For more information on the Iray, visit: www.nvidia.com/irayserver

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