

PROJECT INTRODUCTION

Objectives

To improve the digital animation rendering processes by developing a digital network rendering farm.

Project Investigator / Manager

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Period of Project

01 Sep 2004 – 31 Aug 2005

Website

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Abstract

A 30-second long standard digital animation contains 750 rendered frames (25 frames per second). To render one photo realistic frame can take up to 1 hour to render in a single standalone system. To render the whole 30-second animation this way, it would take about 30 days. By using a network rendering farm of clustered computers, it would only take a matter of several hours.

PROJECT DETAILS

Description

Network rendering is the process of getting multiple computers to render the individual frames of an animation in order to reduce the amount of time needed.

In some cases, one frame rendered relatively photo realistically can take up to 1 hour to render. If one computer were to render a 750 frame animation, taking one hour to render each frame, it would take thirty days to render. By using a lab of twenty computers, for example, it would take less than 2 days. This makes it possible to complete an animation during the period project, and be able to render it at nights when the computer lab is not being used for teaching.