



ScholarWorks

IUPUIScholarWorks Repository → [Theses, Dissertations, and Doctoral Papers](#) → [Electrical & Computer Engineering Department Theses and Dissertations](#) → [View Item](#)

OpenFlow based load balancing and proposed theory for integration in VoIP network

[Pandita, Shreya](#)

Advisor: [Kim, Dongsoo Stephen](#)
[King, Brian](#)
[Rizkalla, Maher E.](#)

Degree: M.S.E.C.E.

Degree Year: 2013

Department: Electrical & Computer Engineering

Grantor: Purdue University

Permanent <http://hdl.handle.net/1805/4444>

Link:

LC Subjects:

[Computer networks -- Research -- Analysis](#) ; [Computer capacity -- Management](#) ; [Internet telephony -- Computer programs](#) ; [Session Initiation Protocol \(Computer network protocol\)](#) ; [OpenFlow \(Computer network protocol\)](#) ; [Internetworking \(Telecommunication\)](#) ; [Computer-aided engineering](#) ; [Software engineering](#) ; [Computer organization](#) ; [Computer network architectures](#) ; [Computer network protocols](#) ; [Multimedia systems -- Computer programs](#) ; [Instant messaging -- Computer programs](#) ; [Switching theory](#)

Date: 2014-05-21

Abstract:

In today's internet world with such a high traffic, it becomes inevitable to have multiple servers representing a single logical server to share enormous load. A very common network configuration consists of multiple servers behind a load balancer. The load balancer determines which server would service a clients request or incoming load from the client. Such a hardware is expensive, runs a fixed policy or algorithm and is a single point of failure. In this paper, we will implement and analyze an alternative load balancing architecture using OpenFlow. This architecture acquires flexibility in policy, costs less and has the potential to be more robust. This paper also discusses potential usage of OpenFlow based load balancing for media gateway selection in SIP-PSTN networks to improve VoIP performance.

My Account

[Login](#)
[Register](#)

Statistics

[View Usage](#)

Description:

Indiana University-Purdue University Indianapolis (IUPUI)

Files in this item



Name: Shreya_Thesis.pdf

[View/Open](#)

Size: 2.252Mb

Format: PDF

Description: My thesis

This item appears in the following Collection(s)

- [Electrical & Computer Engineering Department Theses and Dissertations](#)

[About Us](#) | [Contact Us](#) | [Send Feedback](#)

Fulfilling the Promise

[Privacy Notice](#)

 [Copyright](#) ©2015 The Trustees of [Indiana University](#), [Copyright Complaints](#)