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Architecturen en algoritmen voor netwerk- en dienstbewust Grid-resourcebeheer

Architectures and Algorithms for Network and Service Aware
Grid Resource Management

Bruno Volckaert



Proefschrift tot het bekomen van de graad van
Doctor in de Ingenieurswetenschappen:
Computerwetenschappen
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Dankwoord

dankwoord...

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Bruno Volckaert

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List of Acronyms

A

ACE	Adaptive Communication Environment
ASAP	As Soon As Possible

C

CDR	Common Data Representation
CM	Connection Manager
CORBA	Common Object Request Broker Architecture
CR	Computational Resource

D

DIT	Directory Information Tree
DN	Distinguished Name
DR	Data Resource

E

EGEE	Enabling Grids for E-Science in Europe
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F

FCFS	First Come First Served
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G

GA	Genetic Algorithm
GGF	Global Grid Forum
GIIS	Grid Information Index Server
GMA	Grid Monitoring Architecture
GRIS	Grid Resource Information Service
GS	Grid Scheduler
GUI	Graphical User Interface

H

HTTP	HyperText Transfer Protocol
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I

IAT	Inter Arrival Time
ILP	Integer Linear Program
IP	Internet Protocol
IS	Information Service
ISP	Internet Service Provider

J

JAMM	Java Agents for Monitoring and Management
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L

LAN	Local Area Network
LCG	LHC Computing Grid
LDAP	Lightweight Directory Access Protocol
LHC	Large Hadron Collider

M

MAN	Medium Area Network
MDS	Globus Monitoring and Discovery Service
MPLS	MultiProtocol Label Switching

N

NWS	Network Weather Service
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O

OGSA	Open Grid Services Architecture
OGSI	Open Grid Services Infrastructure

Q

QoS	Quality of Service
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R

R-GMA	Relational Grid Monitoring Architecture
RM	Replica Manager
RTT	Round Trip Time

S

SM	Service Manager
SMON	Service Monitor
SOAP	Simple Object Access Protocol
SQL	Standard Query Language

SR Storage Resource

T

TCP Transport Control Protocol
TIO Tivoli Intelligent Orchestrator
TPM Tivoli Provisioning Manager

U

UDP User Datagram Protocol

V

VO Virtual Organisation
VPG Virtual Private Grid
VPN Virtual Private Network

W

WAN Wide Area Network
WS-IS Web Service Information Service
WSDL Web Service Description Language
WSRF Web Service Resource Framework

X

XML eXtensible Markup Language

1

Introduction

1.1 Introduction

1.2 Outline

1.3 Publications

1.3.1 Publications in international journals

1.3.2 Chapters in international publications

1.3.3 Publications in international conferences

1.3.4 Publications in national conferences

2

Grid Monitoring

2.1 Introduction

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3

Grid Simulation

3.1 Introduction

Write text here

4

Grid Service Management

4.1 Introduction

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5

Media Grids

5.1 Introduction

insert text...

6

Overall Conclusion

insert conclusion here



Grid Computing: The Next Network Challenge!

B. Volckaert, P. Thysebaert, M. De Leenheer, F. De Turck, B. Dhoedt, P. Demeester

published in The Journal of The Communications Network (Proceedings of FITCE 2004), 43rd European Telecommunications Congress, 2004, Vol. 3, pp. 159-165.

Abstract *abstract*

A.1 Introduction

Start text here...

B

Application-specific hints in reconfigurable Grid scheduling algorithms

B. Volckaert, P. Thysebaert, F. De Turck, B. Dhoedt, P. Demeester

published in Lecture Notes in Computer Science (LNCS 3038), Computational Science, Proceedings P3 of ICCS 2004, Springer-Verlag Berlin Heidelberg 2004, Krakow, 2004, Vol. LNCS 3038, pp. 149-157.

Abstract *abstract...*

B.1 Introduction

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Network Aware Scheduling in Grids

B. Volckaert, P. Thysebaert, M. De Leenheer, F. De Turck, B. Dhoedt, P. Demeester

published in Proceedings of NOC2004, 9th European Conference on Networks & Optical Communications, TU Eindhoven, 2004, pp. 311-318.

Abstract *abstract*

C.1 Introduction

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