

Authentication, Authorisation and Accounting in a Distributed Multimedia Content Delivery System

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AGENDA

- Introduction
- The challenge
- The solution
- System description
- The solutions to AAA
- Conclusions

Introduction

The facts:

- multimedia ubiquity
- broadband connectivity
- demand for new services
- new market opportunities
- new business arises

The multimedia world actors

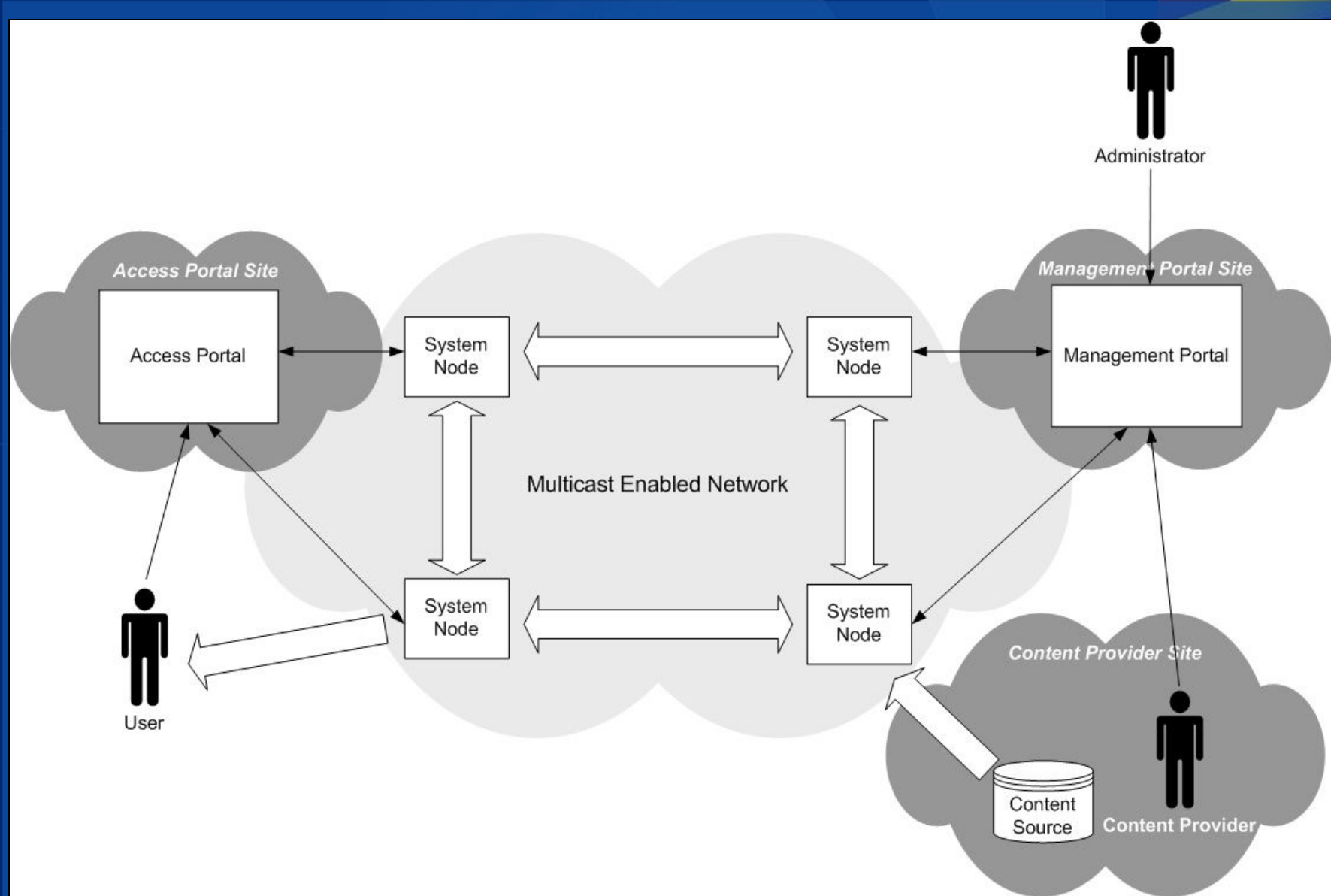
- Content providers
- Network operators
- ISP User Portals
- End users

The challenge

To provide:

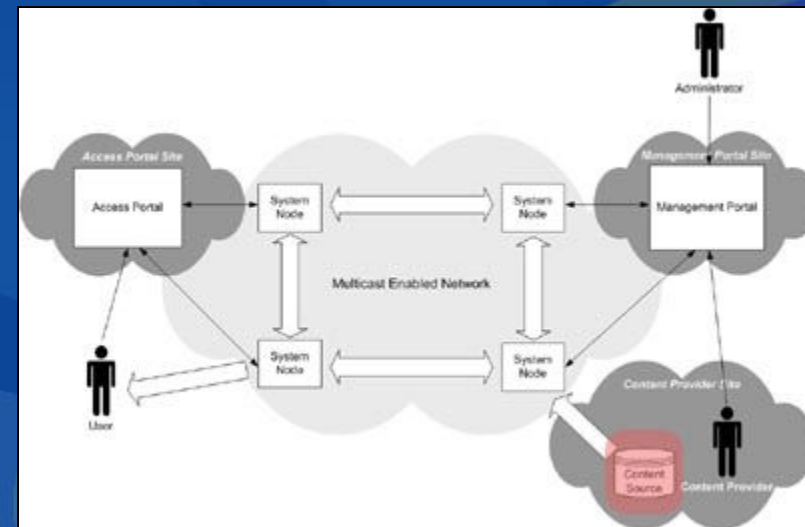
- end-to-end high quality multimedia delivery
- reliability
- scalability
- authentication and authorisation
- accounting
- security
- usability
- transparent access

The solution



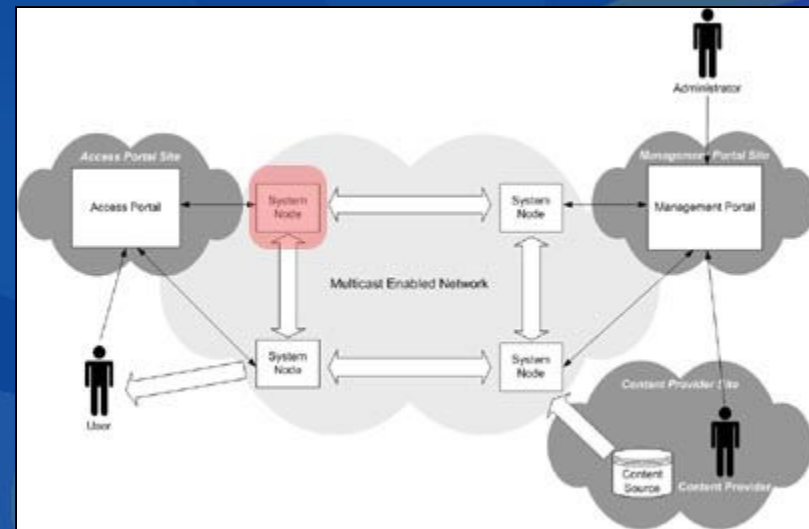
Content Source

- provides live and on-demand content to the system
- allows easy content management
- allows easy content publication
- many sources for one Content Provider



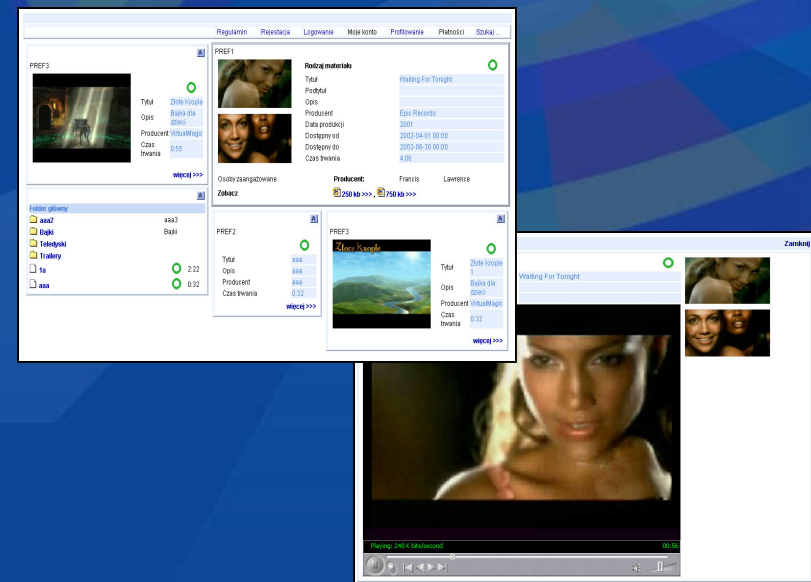
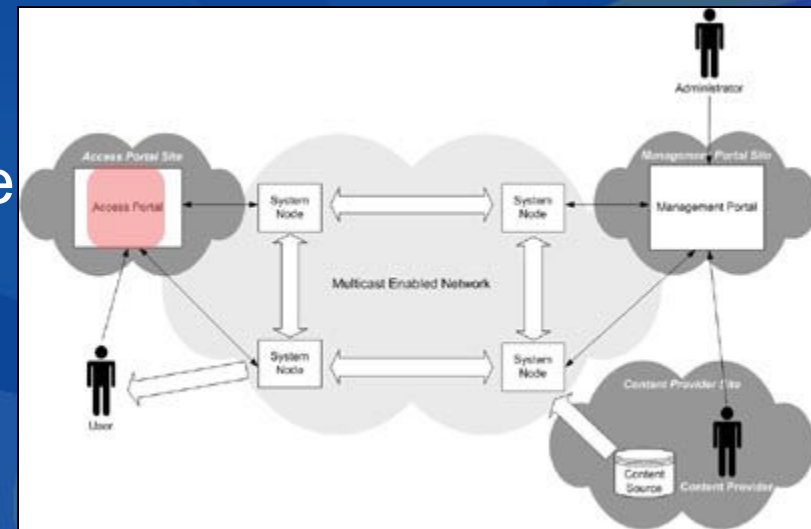
System node

- distributed over the network
- supports multicast content distribution
- provides content caching and splitting
- allows request routing
- allows content localization
- supports load balancing
- supports distributed authentication
- performs local accounting



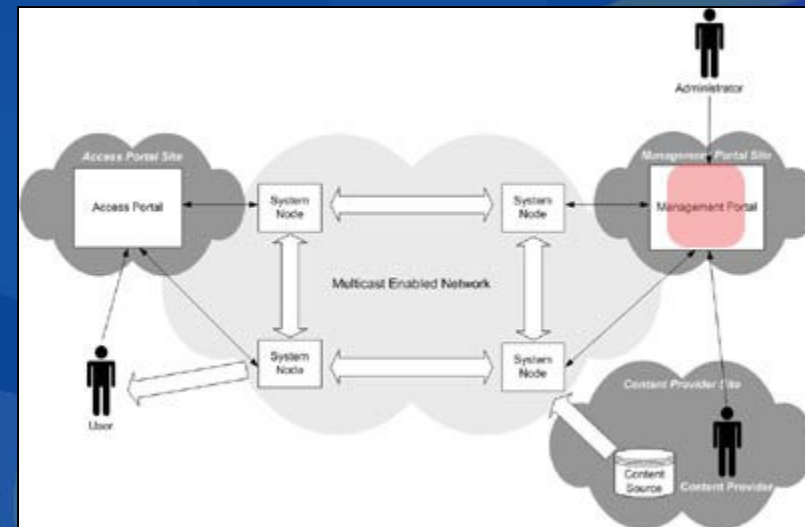
Access Portal

- allows users management
- presents content catalogue
- provides access to the content
- performs authentication, authorisation and accounting
- provides information services
- provides profiling and personalisation services



Management Portal

- allows system management
- allows content management for Content Providers
- provides catalogues for Access Portals





Edycja materiału: strona 13

Panel: Tabela główny / Trójniak / Jennifer Lopez

Edytor informacji o materiale

Tytuł	Waiting For Tonight
Podtytuł	
Opis	
Producent	Epic Records
Data produkcji	2001
Dostępny od	2002 4 1 0 0
Ważny do	2002 6 30 0 0
Czas trwania	4:08
Publikacja	Cyfrowa

Ilustracje do materiału

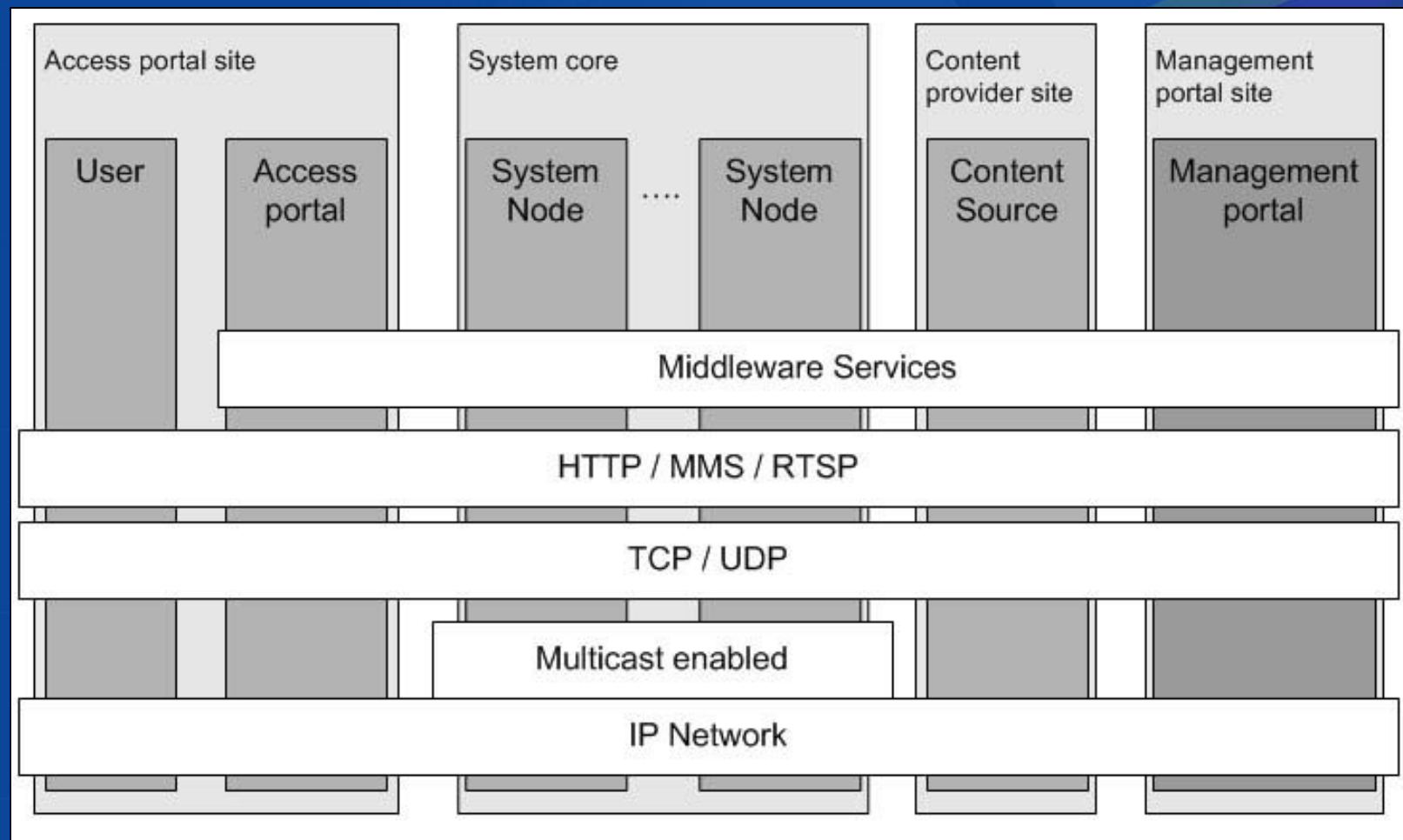
Obrazek	Tytuł	Operacja
		Usuń
		Usuń

Brows...

Dodaj

Następna strona

The middleware



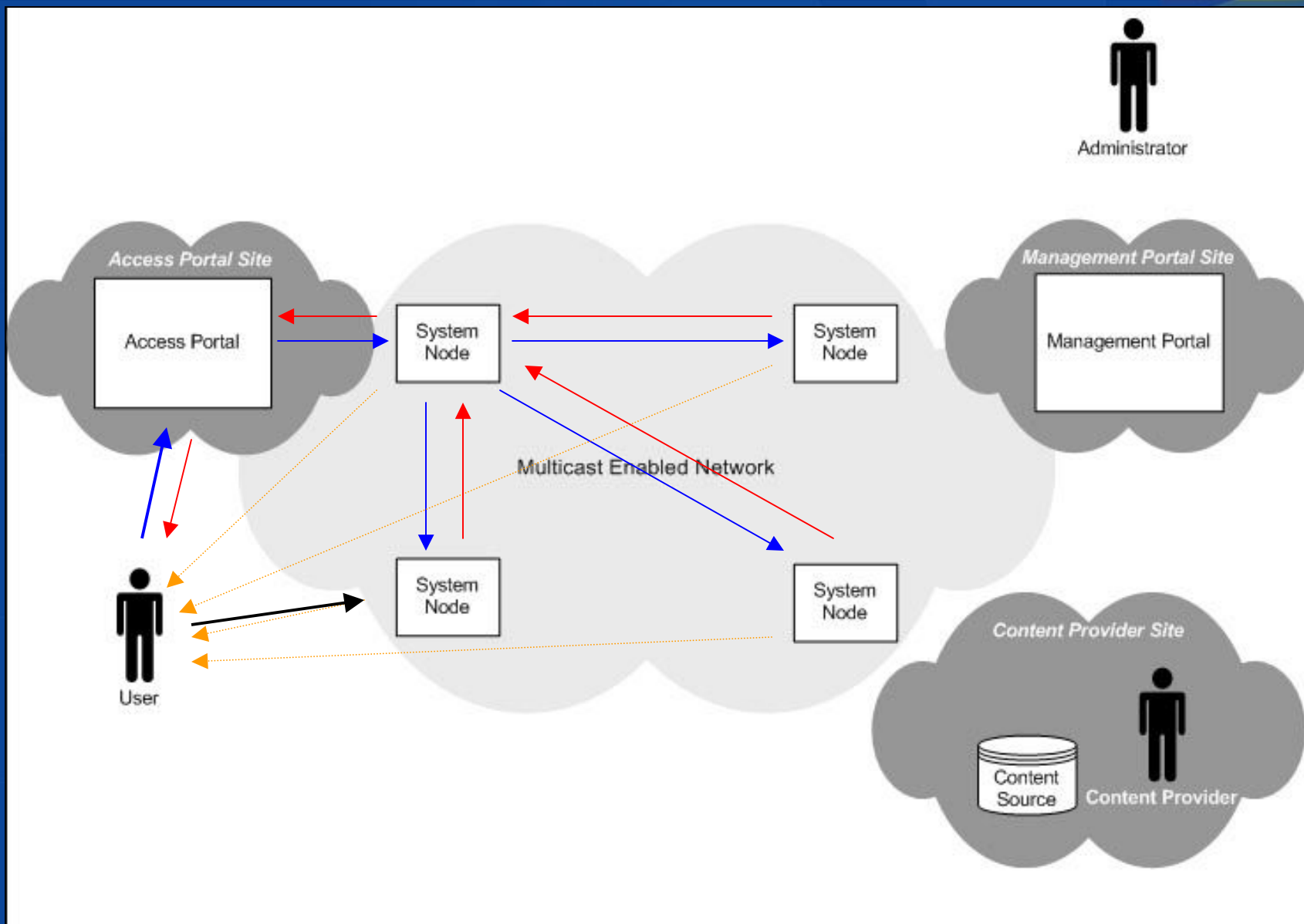
The advantages

- on-demand and live content support
- high quality content delivery
- scalability and reliability
- transparent content access through Access Portals
- ease of content management for Content Providers
- content distribution policy control
- distributed authentication and authorisation
- pay-per-view ready accounting model

Proposed solutions

- Request routing
- Authentication and authorisation
- Accounting

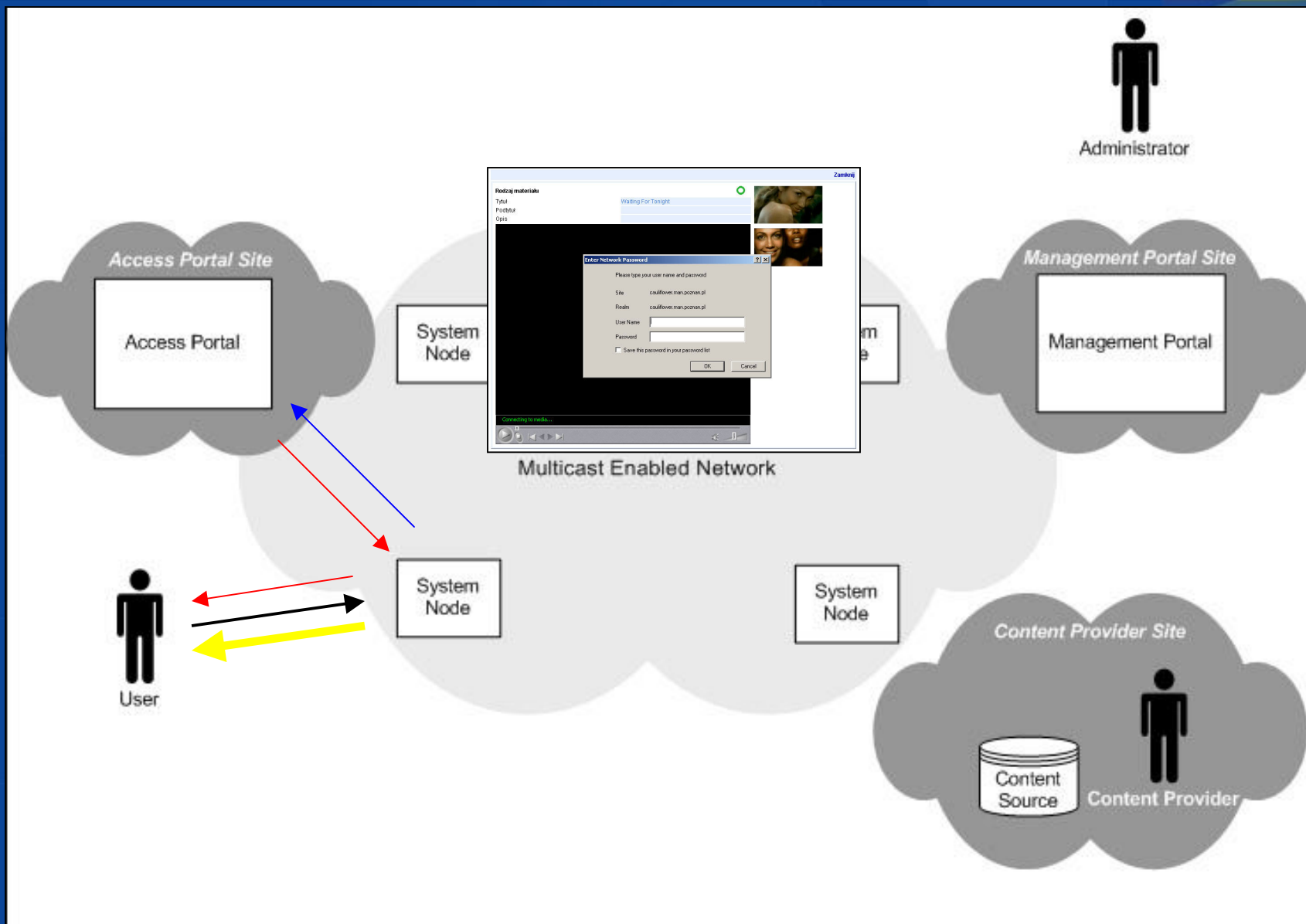
Request routing



Request routing model

- based on current network statistics
- based on current system load
- supports load balancing
- provides reliability and scalability
- enables high quality end-to-end multimedia delivery

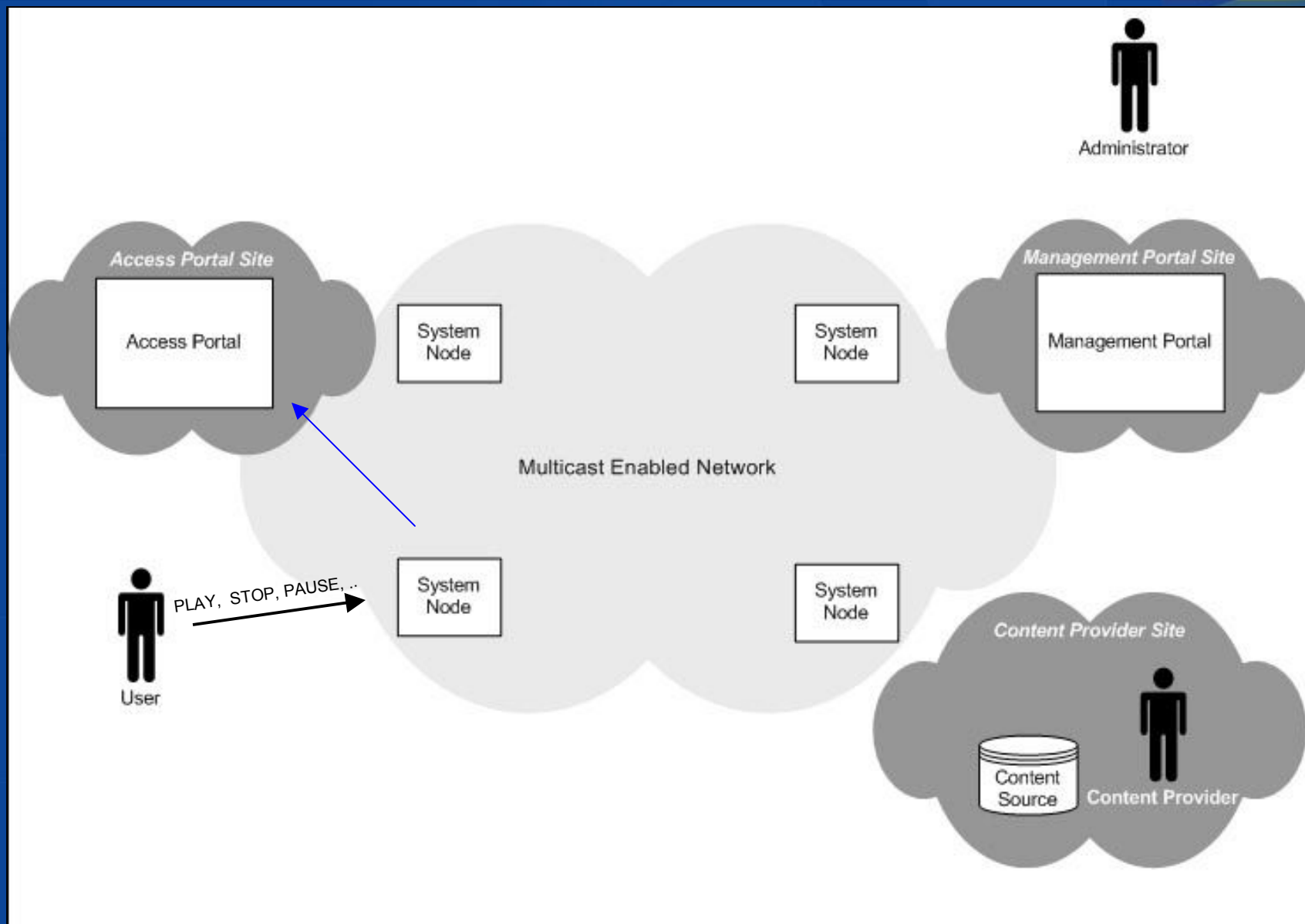
Request authorisation



Authentication and authorisation model

- based on Circle of Trust among Access Portals and Content Delivery System
- supports distributed rights management
- allows easy users management
- provides scalability and reliability
- supports different business models

Accounting process



Accounting model

- scalable and open solution
- pay-per-view ready
- allows to deploy different billing models for different Content Providers
- enables future SLA deployment

The technology

- Java and .NET technology
- JDBC database access
- SOAP protocol and WebServices (middleware)
- Java Servlet and DHTML technologies (portal).
- Microsoft Windows Media (streaming platform)
- COM components (AAA plugins)
- Oracle 9i (DBMS)

Summary

Conclusions

- Clear business roles defined
- Open and scalable grid-portal solution
- Ready to deploy other streaming media platforms
- Provides transparent content access
- Distributed and easy to deploy authentication process

Future Works

- Middleware security improvements
- Content distribution policy development
- Load balancing procedures testing and improvement



Contact

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