Softswitch Access Scheduling Switch



Overview

This paper analyzes the meaning of softswitch technology and the problems existing in China''s electric power dispatching network, and elaborates the specific application of softswitch in the...

Key Takeaways

A Softswitch Access Scheduling Switch is a software-based telecommunication switch that manages call routing, media gateway control, and time-sensitive scheduling in IP and hybrid networks.

Overview of Softswitch

A softswitch is a software-driven call-switching node that replaces traditional hardware-based telephone exchanges, enabling the routing of voice, video, and data over IP networks (VoIP) while also interfacing with legacy PSTN systems when needed. It typically runs on general-purpose computing platforms and provides the intelligence for establishing, maintaining, and terminating sessions. Softswitches are often categorized as: Class 4 Softswitches: Handle long-distance or carrier-to-carrier call routing.

Class 5 Softswitches: Operate in access networks, connecting end-user lines to the carrier's VoIP network.

Access and Media Gateway Control

© 2026 EXF OPTICAL NETWORKS - All rights reserved

In access networks, a softswitch functions as a Media Gateway Controller (MGC) or Call Agent, managing media gateways that convert between IP packets and traditional TDM circuits or analog lines. It communicates with media gateways using protocols like SIP, H. 323, or MGCP, and with signaling gateways to interwork with legacy SS7 networks.

This allows seamless integration of IP-based services with traditional telephony.

Scheduling and Time-

Sensitive Networking

Modern softswitches can implement time-sensitive networking schedules, which are critical for applications requiring low-latency or deterministic packet delivery, such as industrial control systems. These systems can: Deploy updated softswitch configurations to enforce new scheduling rules. Simulate network traffic to ensure latency targets are met before applying changes.

Replace or update softswitch instances dynamically to maintain service continuity. This scheduling capability ensures that calls and data streams meet strict timing requirements, improving reliability and performance in both enterprise and carrier networks. Integration with OSS/BSS and ServicesSoftswitches also interface with Operational Support Systems (OSS) and Business Support Systems (BSS) for billing, call logging, and service management.

They support a wide range of services including voice, video, fax, and emerging multimedia applications, and can interact with IP, wireless, cable, and broadband networks. This makes them a central component in next-generation networks (NGN) and IP Multimedia Subsystem (IMS) architectures.

Key Benefits

Flexibility: Software-based, easily updated or reconfigured. Cost Efficiency: Reduces reliance on proprietary hardware. Scalability: Supports multiple media gateways and high port densities.

Time-

Sensitive Control: Ensures low-latency and reliable packet delivery for critical applications. In summary, a Softswitch Access Scheduling Switch combines the call control intelligence of a softswitch with scheduling capabilities to manage access network traffic efficiently, ensuring seamless integration of IP and legacy telephony services while meeting strict timing and quality requirements.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Article Content

Research and Application of Soft Switching Technology in Power ...

This paper analyzes the meaning of softswitch technology and the problems existing in China''s electric power dispatching network, and elaborates the specific application of softswitch in the...

Research on interconnection of power scheduling softswitch system ...

We aim at solving the problem of scheduling business interoperability that existed in the testing process, and providing specific and feasible standards for the interoperability between the scheduling systems

Research and Application on Softswitch Technology in Power

The structure includes softswitch controller layer, softswitch business layer, softswitch transport layer, softswitch access layer and scheduling desk. Then the numbering principles of softswitch are

Lutron Softswitch128 System Setup & Maintenance Guide | AI

Learn how to manage circuits, assign functions to wallstations and contact closure inputs, and configure emergency power mode. It also describes integrating with building management systems via RS232

How Does a Softswitch Work: Key Components & Use Cases

Learn how does a softswitch work, its key components, how to setup and configure a softswitch along with practical use cases.

softswitch128_240.qxp

Softswitch128 is a switching system that is ideal for small to medium sized switching projects. A system consists of panels, control stations, occupancy sensors and photocells.

Lutron Electronics Softswitch 128 Setup And Maintenance Manual

Addressing may be found in either the Softswitch 128 Installation Guide or individual device installation guides. Refer to the instructions for each device on how to set the address.

Principle and Application Analysis on Soft-Switching Circuits

Firstly, this paper analyzes the basic principle of soft-switching circuits in details, emphasizes on some kinds of circuits. Finally, necessary analysis of the characteristics on the key circuits is given.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Yeti Switch — Open-Source SIP SBC, Class 4 Softswitch & VoIP

Yeti Switch is an open-source, carrier-grade SIP Class 4 Session Border Controller (SBC) / softswitch and VoIP billing system, with real-time billing, least-cost routing, and a REST API.

What is a Softswitch?

What is a Softswitch? A softswitch provides call control intelligence for establishing, maintaining, routing and terminating sessions in Voice over IP (VoIP) networks. Softswitches were originally employed by

StarTrinity VoIP Softswitch Tutorial

Default folder with softswitch program files is C:Program Files (x86)StarTrinitySoftswitch Start service "StarTrinity Softswitch" Access web UI

What is a Softswitch? How It Works and 5 Types

How is a Softswitch Different from a Traditional Switch? Traditional switches, often called Class 5 switches, are hardware-based devices used to

Flexible optimal dispatching of distribution network considering the ...

Based on the analysis of flexibility adjustment ability, considering node-type flexibility resources and network-type flexible resource intelligent soft switching (soft open point, SOP), and

What is a Softswitch?

What is a Softswitch? A softswitch, also known as a software switch or media gateway controller, is a software-based device or application that enables the routing and control of voice,

Research on interconnection of power scheduling softswitch system ...

In the process of evolving from the traditional circuit-switched network to the soft switch-based scheduling switching network, each pilot region of the State Grid Corporation has a lack of

lighting control solutions | switching systems

Switching panels can be purchased with or without circuit breakers to achieve the most economical installation. Low-voltage, daisy-chain wiring between panels and wallstations minimizes home-run

Circuit Switched Core

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Open Mobile Softswitch features We offer a market leading Rel-4 mobile voice solution based on state-of-the-art ATCA hardware, which delivers high performance while guaranteeing backward

Optimal Configuration Strategy of Soft Open Point in Flexible ...

The SOP working mode can seamlessly switch according to the actual distribution network, and the switching time can be in minutes or hours. This article uses a two-port inverter with

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: https://explosivefunctions.co.za
Technical inquiry: https://explosivefunctions.co.za/contact.html
EU project coordination: Parque das Nações, Lisbon, Portugal

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 EXF OPTICAL NETWORKS - All rights reserved