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Resource Modeling of Power Communication Packet Optical Transport Network

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ZhiXin Lu, LianYu Fu, YiZhao Liu & XiYang Yin

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Abstract

With the explosive growth of information, data traffic has gradually become the main body occupying the communication network, and the grouping of services and carriers is the current general trend. The industry has put forward a new power communication network POTN (Packet Optical Transmission Network), POTN can carry on the unified scheduling and management to different levels. After years of development, the POTN network has gradually matured, but there are still some problems such as weak communication network structure and insufficient transmission capacity. This paper mainly studies the POTN resource modeling, and develops the simulation system based on the POTN, realizes the mapping and reuse of client services, improves the protection mechanism of the POTN network, and completes the reasonable planning and optimization of the transmission network topology. Aiming at the convergence problem of multiple services based on POTN technology, the aggregation algorithm is designed to improve the bandwidth and port resource utilization of devices, Finally, the simulation analysis of the experiment provides important theoretical support for the construction of equipment model and network topology.

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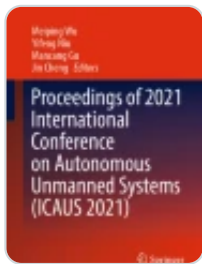
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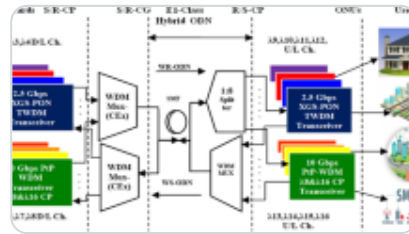
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Author information

Authors and Affiliations

State Grid Tianjin Electric Power Company, Tianjin, 300100, China
ZhiXin Lu, LianYu Fu, YiZhao Liu & XiYang Yin

Editor information

Editors and Affiliations

Texas A&M University-Commerce, Commerce, TX, USA
Meikang Qiu

Beijing Institute of Technology, Beijing, Beijing, China
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