

1. Record Nr.	UNINA9910135298503321
Titolo	IEEE Std 1905.1a-2014 (Amendment to IEEE Std 1905.1-2013) . Amendment 1 Support of New MAC/PHYs and Enhancements : IEEE Standard for a Convergent Digital Home Network for Heterogeneous Technologies // Institute of Electrical and Electronics Engineers
Pubbl/distr/stampa	New York : , : IEEE, , 2015
ISBN	0-7381-9496-4
Descrizione fisica	1 online resource (ix, 38 pages) : illustrations
Disciplina	643.6
Soggetti	Home automation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	An abstraction layer for multiple home networking technologies that provides a common interface to widely deployed home networking technologies is defined in this standard: IEEE 1901(TM) over power lines, IEEE 802.11(TM) for wireless, Ethernet over twisted pair cable, and MoCA 1.1 over coax. Additional network technologies are supported by an extensible mechanism using an IEEE OUI and an XML-formatted document. Connectivity selection for transmission of packets arriving from any interface or application is supported by the 1905 abstraction layer. Modification to the underlying home networking technologies is not required by the 1905 abstraction layer, and hence it does not change the behavior or implementation of existing home networking technologies. The 1905 abstraction layer is between layers 2 and 3 and abstracts the individual details of each interface, aggregates available bandwidth, and facilitates seamless integration. The 1905 abstraction layer also facilitates end-to-end quality of service (QoS) while simplifying the introduction of new devices to the network, establishing secure connections, extending network coverage, and facilitating advanced network management features including discovery, path selection, autoconfiguration, and QoS negotiation.