

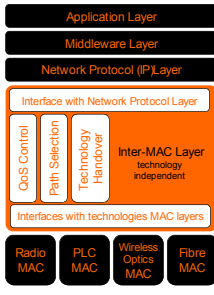


Gigabit Home Networks, OMEGA ICT project

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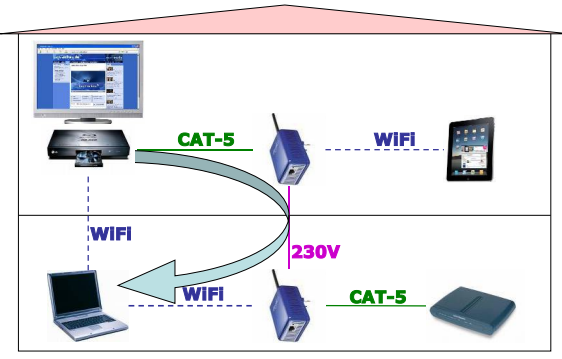


Inter-MAC, Convergence Layer



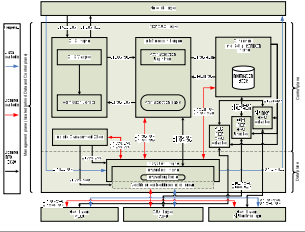
A **technology-independent MAC layer** will control the home network and provide services as well as connectivity to any number of devices the user wishes to connect to the OMEGA network. This Inter-MAC layer will allow the service to "follow the user" from device to device.

Inter-MAC Application Example

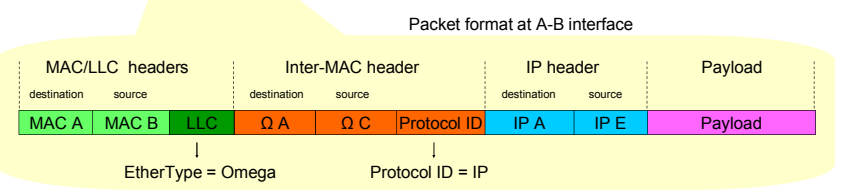
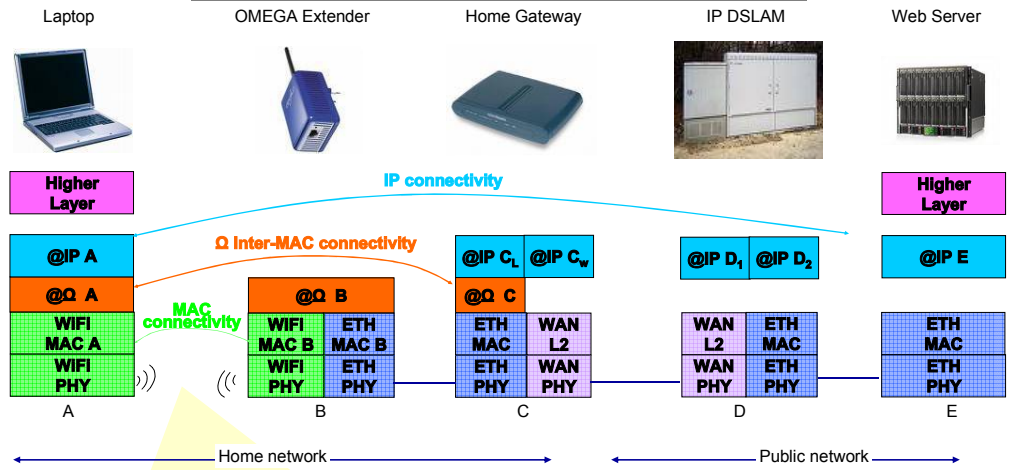


Inter-MAC automatically configures a path for the HD flow from blue ray player to PC with guaranteed QoS, triggered by UPnP request. The data stream uses 3 different physical media. In case of failure of the 230V link a new path over the direct WIFI link is automatically established within less than 1 second. This path supports standard TV quality only. If the 230V link becomes available again Inter-MAC switches back to the HD path.

Inter-MAC draft Block Diagram



Inter-MAC end-to-end Layer Model & Packet Format



The special EtherType "OMEGA" to be standardized at IEEE.

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The research leading to these results has received funding from the European Community's Seventh Framework Programme FP7/2007-2013 under grant agreement n° 213311 also referred as OMEGA.

