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Common Object Request Broker-based Publisher-Subscriber Middleware for Internet of Things - Edge Computing

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Abstract **- The edge computing layer in IoT reduces the flow of a massive amount of data directly to the cloud by processing some data in the local network. The middleware in the layer enables this processing of data and the communication between heterogeneous devices and services in the nearby layers. CORBA,which uses as a powerful middleware technology in developing middleware solutions in enterprise-level distributed applications, has been abandoned in the current generation. The paper presentsthe design, and the performance evaluation of a publisher- subscriber middleware implemented using CORBA that was studied when exploring the applicability of CORBA as an IoT edgecomputing middleware. The evaluation was continued in two stepsto analyse several parallel connections (Load test) and handle requests in a unit time (burst test) via simulating an IoT environment in a cloud environment.**

Keywords **- CORBA, edge computing, IoT, middleware**