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## Distributed Simulation Using RESTful Interoperability Simulation Environment (RISE) Middleware

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**Abstract:** Distributed simulation practice outside the military sector is still limited. Having plug-and-play or automatic middleware interoperability is one of the main challenges is needed to advance distributed simulation, as indicated by several surveys; hence, interoperability must be achieved effortlessly with rational cost. They further indicate the need of having general pluggable container where lightweight commercial-off-the-shelf (COTS) simulation components can be plugged into the container with minimal development time. However, existing middleware solutions have been complex so far to overcome these distributed simulation issues. The RESTful Interoperability Simulation Environment (RISE) is the first existing middleware to be based on RESTful Web-services. RISE uses the Web plug-and-play interoperability style to overcome distributed simulation issues. Our focus here on plugging simulation components into RISE and on interoperating independent-developed simulation engines to perform the same distributed simulation session.