# RUNTIME ENVIRONMENT AND LIGHTWEIGHT HYBRID PROGRAMMING

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By

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# RUNTIME ENVIRONMENT AND LIGHTWEIGHT HYBRID PROGRAMMING

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# Background

The Open Run-Time Environment (ORTE) [1] was developed as part of Open MPI [2] project to support distributed high-performance computing applications operating in a heterogeneous environment. Its main characteristics are interprocess communication, resource discovery and allocation, and process launch across different platforms in a transparet manner. Implementation of the ORTE is based on the Modular Component Architecture (MCA) [2].

# Bibliography

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[2] Edgar Gabriel, Graham E. Fagg, George Bosilca, Thara Angskun, Jack J. Dongarra, Jeffrey M. Squyres, Vishal Sahay, Prabhanjan Kambadur, Brian Barrett, Andrew Lumsdaine, Ralph H. Castain, David J. Daniel, Richard L. Graham, and Timothy S. Woodall. Open MPI: Goals, concept, and design of a next generation MPI implementation. In *Proceedings, 11th European PVM/MPI Users' Group Meeting*, pages 97–104, Budapest, Hungary, September 2004.