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**Cross-organizational and distributed EBT support for workflow management applications.**

**Abstract**

For some time now, workflow-management systems have become an accepted technology to support automation in process-centric environments.

Traditional simple transaction model provided by current DBMS is inadequate for workflow management applications as they require advanced transaction management functionality.

Lately there has been a trend to distribute workflow executions, which requires an even more advanced transaction support system that can handle this distribution.

Furthermore, organizations outsource supporting processes to other organizations and concentrate mostly on their core business processes. Organizations form a virtual enterprise where provider organizations offer e-services to consumer organizations.

To offer support for these cross-organizational processes, current workflow management technologies would need to be extended. Transaction support, already considered an important issue in intra-organizational workflow management systems, must be extended to deal with the cross-organizational aspects as well.

The WIDE approach is an orthogonal two-layer transaction model that supports both high-level and low-level workflow semantics. The model supports two independent transaction modules that each of which manages one layer of the model.

This paper presents WIDE and two extensions, the first discussing the extension to the WIDE upper layer providing support for the distributed execution of workflow processes, i.e. distributed global transactions, and the second offering support for cross-organizational processes.

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