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Recursion Keeps Device Developers on the Edge

Voyager Edge intelligent agents divine remote knowledge from network chaff

BY ANDY PATRIZIO

CORBA wasn't meant for handheld computers. So Recursion Software has introduced an intelligent mobile agent and communications framework designed to allow large volumes of data to be processed and distributed across the less-than-reliable mobile networks used by handheld devices.

Introduced at the Systems and Technology Conference in Salt Lake City earlier this month, Voyager Edge is meant for a variety of industries—including health-care, manufacturing and the military—that are reliant on the gathering and management of business intelligence from mobile devices in the field.

Voyager Edge allows agents within the framework to move around or be dispatched, all with rules to perform specified tasks. According to Recursion CTO Bob Deanna, the goal is to provide func-

tionality normally reserved for a desktop or laptop to exist at the edge of a network. "There is an expanding number of devices out in the world and an increasing amount of info being collected with them," he said. "But we still have networks that are unreliable or cannot handle the sheer amount of info being passed over them."

INTELLIGENT ANALYSIS

The problem, as Recursion sees it, is that edge devices don't process data—they simply send back enormous amounts of raw data. If it's a dumb device, like a sensor, then it has no intelligence at all to filter out useless data. The Voyager wizard allows developers to create embedded applications that perform intelligent analysis of raw data on an edge device and filter out unnecessary information.

To be compatible with Voyager Edge, devices must at some time have network

connectivity and the ability to run a JVM. Voyager uses the CORBA (IIOP), SOAP, J2EE (RMI-over-IIOP) and XML-RPC standards for remote communication, and later this year there will be .NET support, Deanna said.

By intelligently determining what information needs to be sent back over the network, Voyager Edge can reduce traffic on an order of magnitude from 10 to 100, said Deanna. It depends on what is being collected. A scan or data input would have less data than a sensor, which takes in everything around it, he said.

The lineage of Recursion's technology dates back to ObjectSpace, which sold off some of its key technologies to Recursion in 2001. That included Voyager, a Java-based distributed computing platform; the C++ Toolkit, a set of class libraries; and Java Generic Libraries, a set of collections, iterators and algorithms for Java development.

A 30-day evaluation download is available at: www.recursionsw.com/Service&Support/downloads.html

For more information on Recursion Software, contact our corporate offices.



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