FILE TRANSFER USING MOBILE AGENT

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KUALA LUMPUR

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FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
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DECLARATION

No portion of the work referred to in this dissertation has been submitted in support of an application for another degree or qualification of this or any other university or institution of higher learning.

(Signature) 23/4/2004
(Date)
ABSTRACT

Mobile agent paradigm is an emerging technology nowadays. It is said to be increasing response time because the code is moved to resources for computation. Motivated by the need to do software upgrades for configuration management, an agent system for transferring documents over local area network was implemented. A performance evaluation was made with client-server computing paradigm in terms of communication costs to transfer files ranging from 100 Kbytes to 2000 Kbytes. We found that mobile agents approach can be used to transfer files over local area network with some performance overhead caused by the agent itself.
ACKNOWLEDGEMENTS

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<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>ATP</td>
<td>Aglet Transfer Protocol</td>
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<tr>
<td>CMIP</td>
<td>Common Management Information Protocol</td>
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<td>CoD</td>
<td>Code on demand</td>
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<tr>
<td>CS</td>
<td>Client-server</td>
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<tr>
<td>FTP</td>
<td>File Transfer Protocol</td>
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<tr>
<td>MA</td>
<td>Mobile agent</td>
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<tr>
<td>NMS</td>
<td>Network management</td>
</tr>
<tr>
<td>OMG</td>
<td>Object Management Group</td>
</tr>
<tr>
<td>ReV</td>
<td>Remote evaluation</td>
</tr>
<tr>
<td>RMI</td>
<td>Remote Method Invocation</td>
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<tr>
<td>RPC</td>
<td>Remote Procedure Call</td>
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<tr>
<td>SNMP</td>
<td>Simple Network Management Protocol</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>Transmission Control Protocol/Internet Protocol</td>
</tr>
<tr>
<td>UNITAR</td>
<td>Universiti Tun Abdul Razak</td>
</tr>
<tr>
<td>LAN</td>
<td>Local Area Network</td>
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