intel Technical Advisory

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Interaction between Caldera Open Unix 8 and Intel® 82544 based NICs may Produce Anomalies

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Products Affected

Product Name	Product Code
Intel® server board SSH4	BSHBASE
Intel® server platform SPSH4	SSHCBPBE, SSHCBPBK, SSHCBRBK
Intel® server platform SRSH4	SSHDVRBK

Description

Under high stress operations an SSH4 based server configured with Intel[®] 82554 based Gigabit NICs and Caldera Open Unix 8 may exhibit anomalous behavior which could include lost transactions. This condition has only been observed in an Intel lab environment. To date, no customers have reported this issue. These data anomalies have only been observed on client PCs and have not been observed on the server. Intel has not been able to reproduce this condition under any other operating system or NIC.

The anomalies have only been observed under a very specific test configuration. The server configuration includes an SPSH4 or SRSH4 server running Caldera Open Unix 8.0, one or more active Intel 82544 based Gigabit NICs, and Samba 2.2 configured for 32KB packet transfer, with client systems running Microsoft Windows communicating with the server via UNC (e.g. \servername\sharename) connections.

Root Cause

This issue is still under investigation and root cause has not yet been determined. The interaction between the Intel 82554 Gigabit network controller and Caldera Open UNIX 8 is being investigated.

Workarounds

Although the stress conditions required for replication of this problem have only been observed under lab conditions, until Intel can determine root-cause Intel recommends that customers refrain from using Intel 82554 based Gigabit NICs with Caldera Open Unix 8 on SSH4 based servers at Gb speeds when using Samba 2.2. Customers wishing to use Gb speed should use samba 2.2.5 which has not shown this behavior. Please see the SSH4 Tested Hardware and OS List (THOL) for a list of current supported products.

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