



Clavister Firewall Test "Network Computing" **Firewall Performance analysis, May 2004**

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Clavister Firewall Test "Network Computing"

Introduction

The Clavister Firewall M 460 was one of 11 Firewalls that were tested in the German Computer Magazine "Network Computing" in April 2004.



Network Computing is one of the leading technical IT-Magazines in Germany. The test was performed at the University in Stralsund by Dr. Bernhard Stütz.

Network Computing Magazine focuses the following topics:

- Network Operating Systems
- Protocols
- Server-Client Technologies
- Security Software and security devices

The goal of this test was, how fast current Firewall-Appliances can handle secured communication traffic.



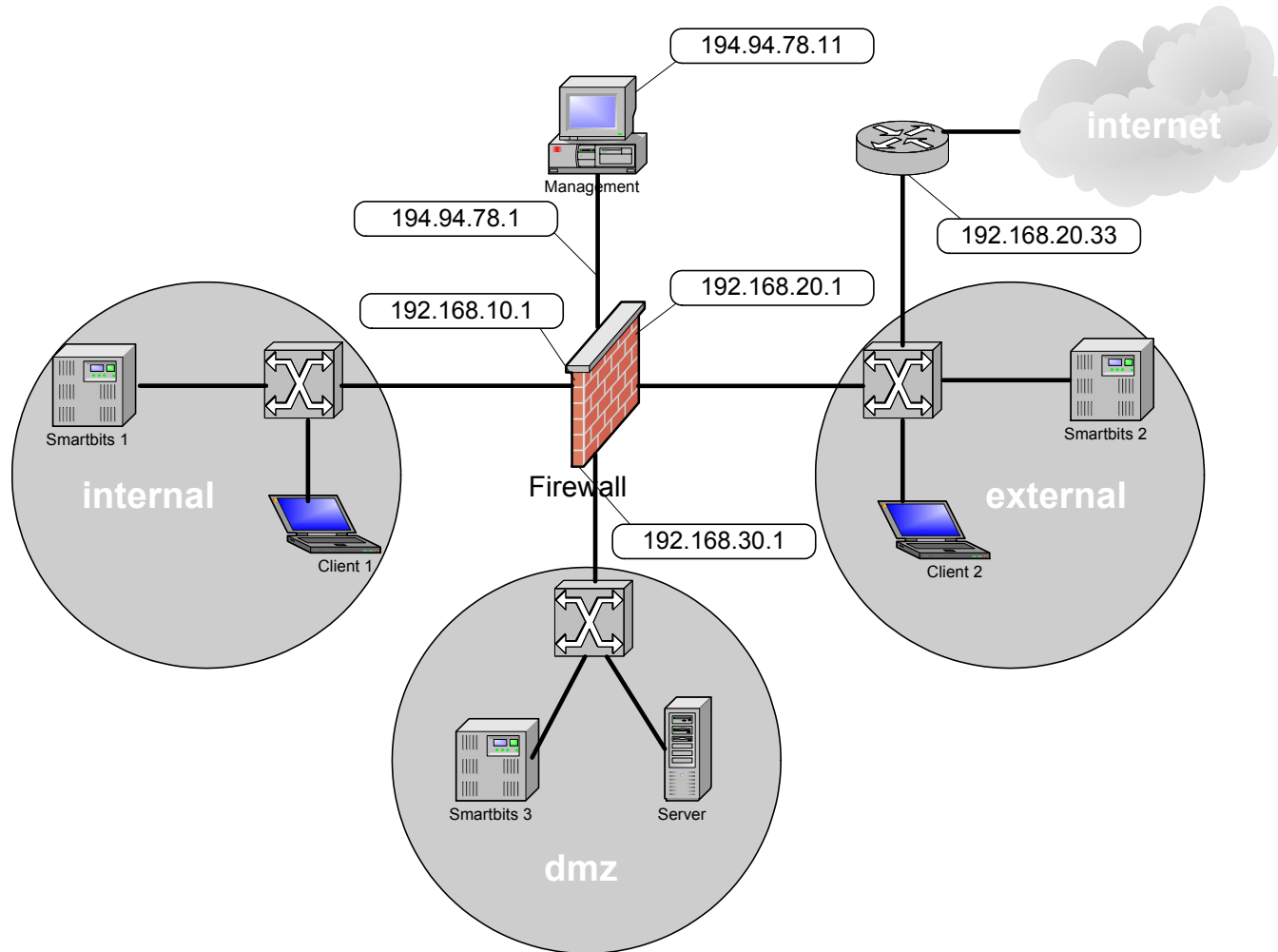
Participants

The Top-6 participants of this "Fast Ethernet Firewall - Test " where:

| <u>Position</u> | <u>Product</u> | <u>Grade</u> |
|-----------------|-------------------------|--------------|
| 1:st | Clavister M 460 | (A+) |
| 2:nd | Bintec VPN Access 1000 | (B+) |
| 3:rd | Sonicwall Pro 3060 | (B) |
| 4:th | Astaro timeNET secuRACK | (B) |
| 5:th | Lucent Brick 350 | (B) |
| 6:th | Cisco PIX 515E | (B-) |

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Test Scenario - logical Overview -



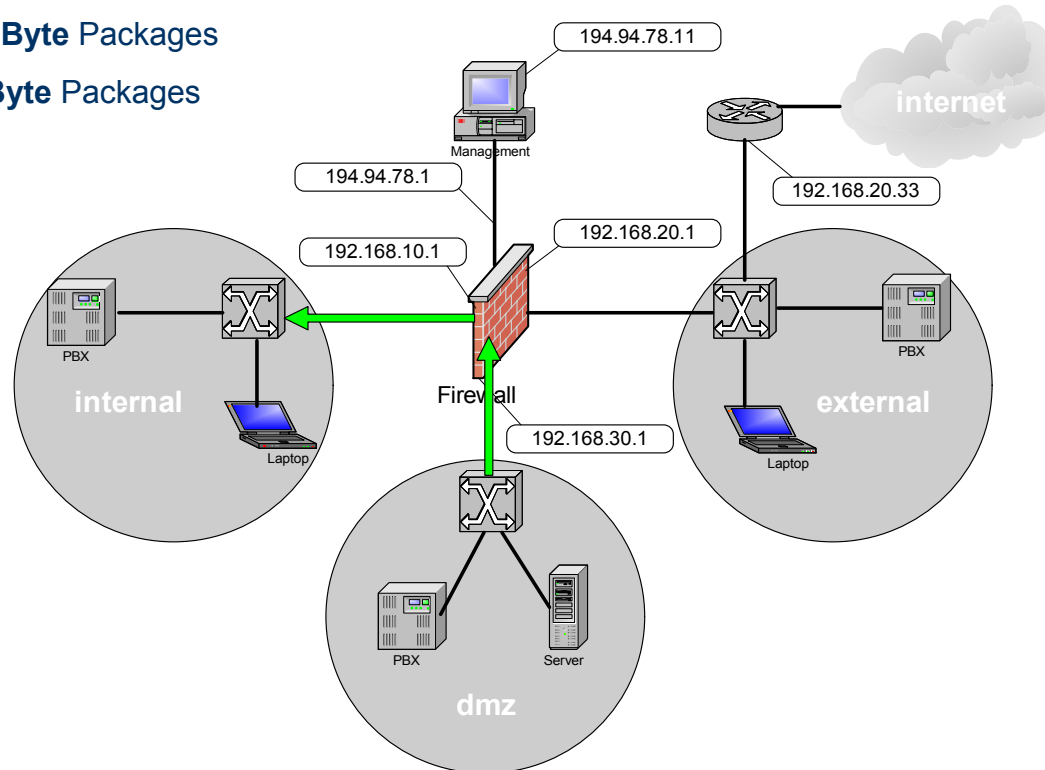
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Test Procedure

The Network Computing Magazine arranged three test procedures that were divided in three subtest.

I. **unidirectional:** one way traffic from dmz to the internal net

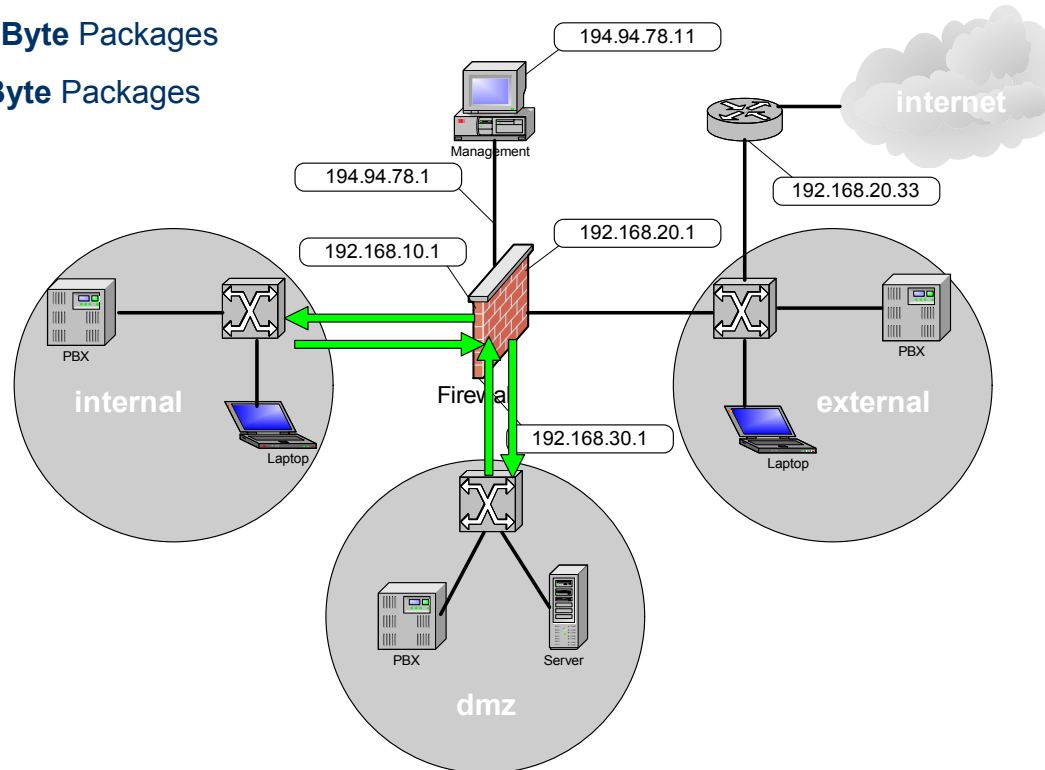
- I. **1518 Byte Packages**
- II. **512 Byte Packages**
- III. **64 Byte Packages**



Test Procedure

II. multidirectional: parallel traffic from dmz to the internal net

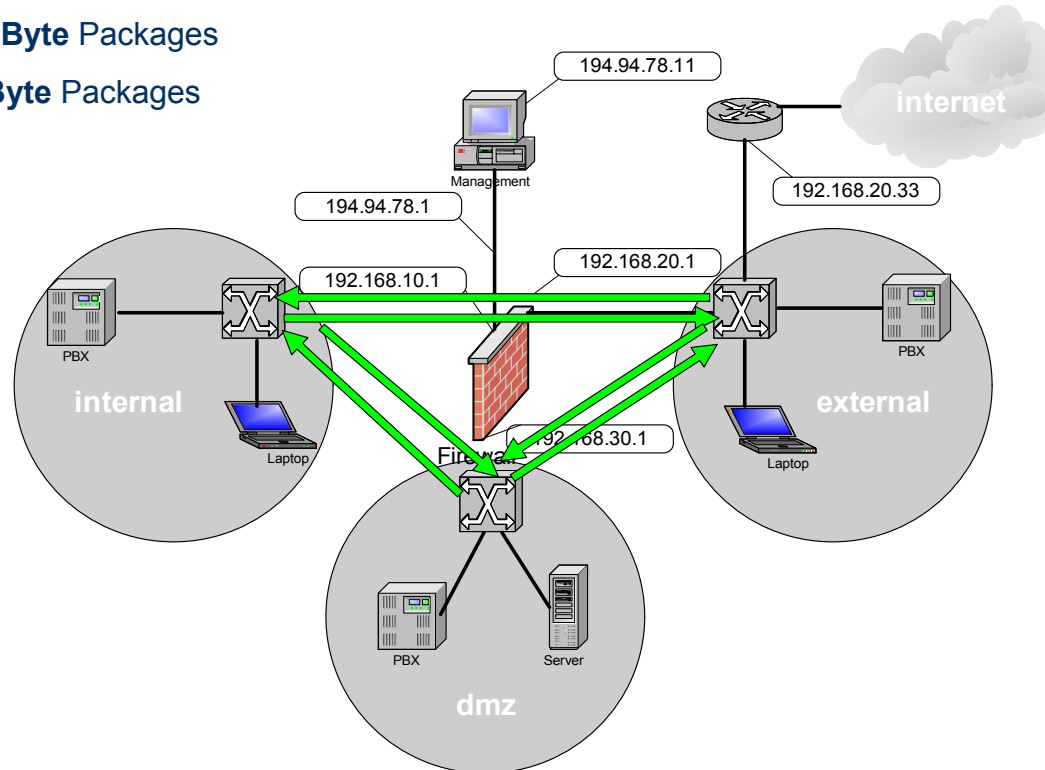
- I. 1518 Byte Packages
- II. 512 Byte Packages
- III. 64 Byte Packages



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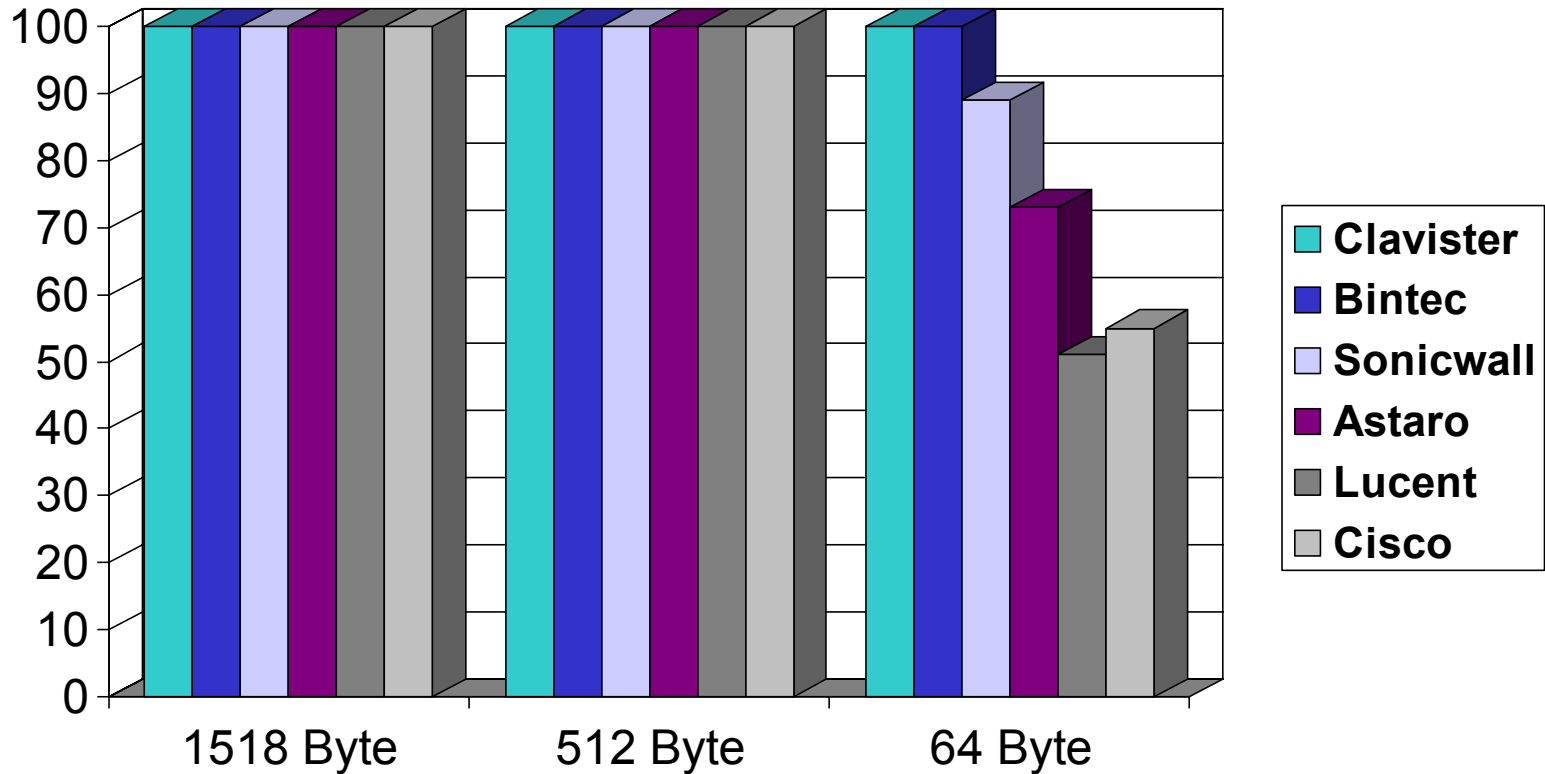
Test Procedure

- III. many to many: meshed traffic between internal, external and dmz net
 - I. 1518 Byte Packages
 - II. 512 Byte Packages
 - III. 64 Byte Packages



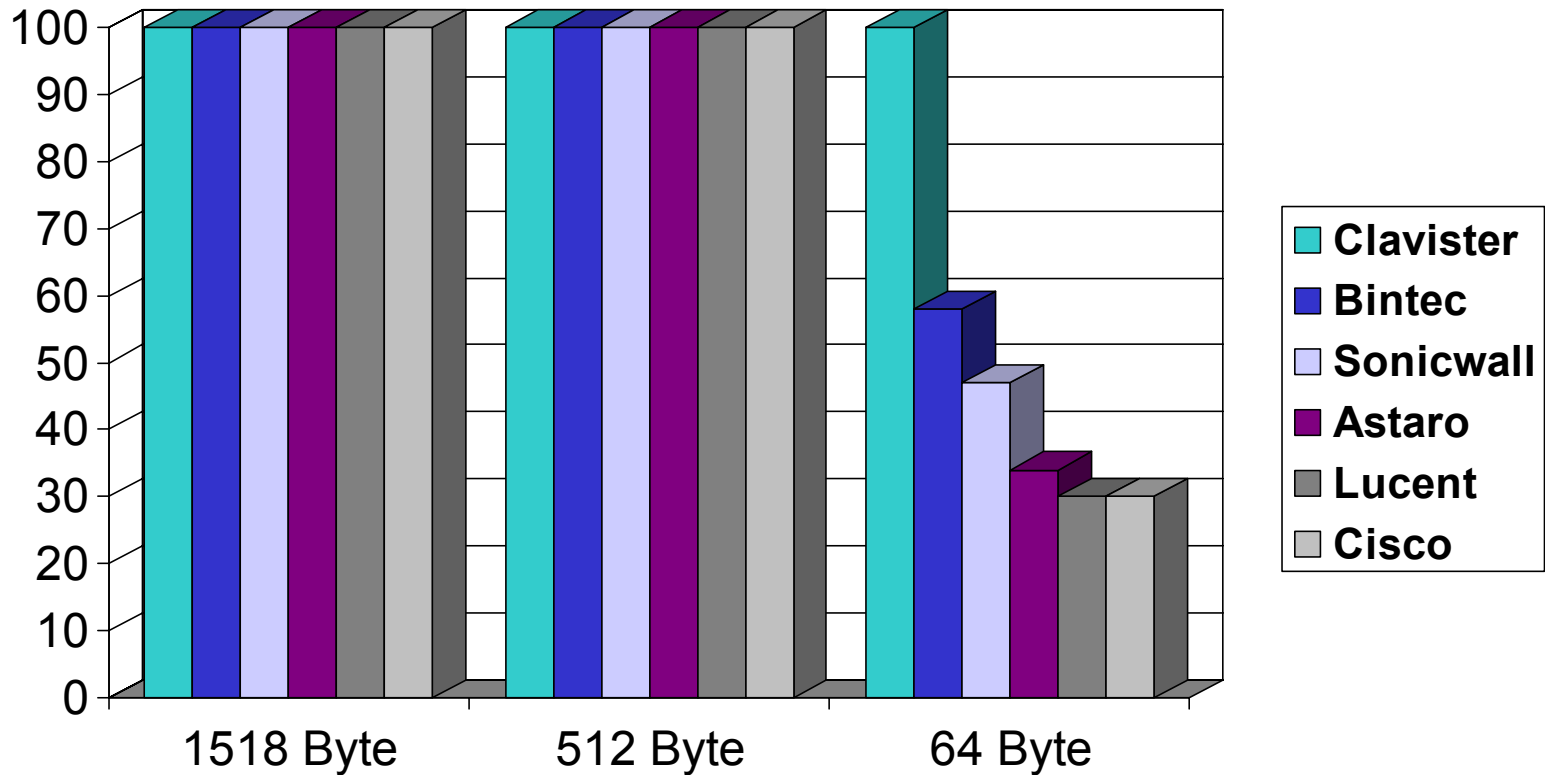
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Results unidirectional



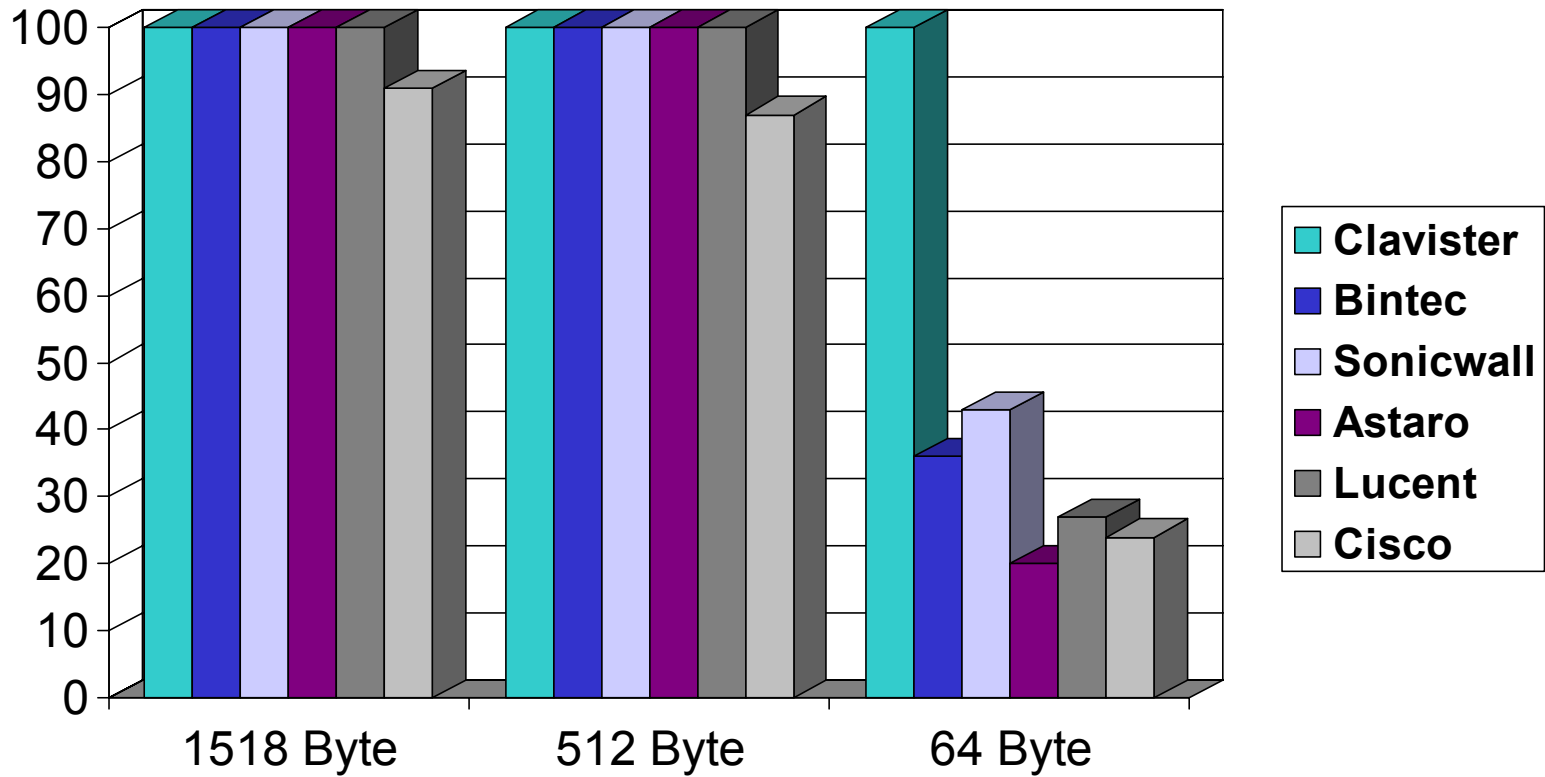
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Results multidirectional



Clavister Firewall Test "Network Computing"

Results many to many



Firewall Test Summary

The Clavister M460 offers enterprise performance and functionality needed for efficient and flexible security solutions.

- The Clavister Firewall Solution offers **wire-speed in all** test scenarios.
- The M460 is the only solution in the Firewall test that **won't become the bottle neck** in the tested scenarios
- Mostly 50 % of the whole network traffic are 64-Byte-Packages



Top 10 features

- "Stateful Packet Inspection" firewalling
- Integrated Office-to-office and mobile users VPN
- Bandwidth Management
- User Authentication
- Intrusion Detection / Prevention
- Application Recognition
- Content Filtering
- Secure multimedia with support for H.323
- Virtual Routers with advanced routing capabilities
- Centralised enterprise security management system
- High performance

Thank you!