



High – Performance  
DDoS Mitigation  
Technology

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Who are we?

*Who are we?*

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- Industry Professionals
- Fields:
  - IT
  - Security
  - Computer Networking
  - ISP's / Large Networks
- Experience:
  - Leaders: 20+ years
  - Dealt with all kinds of network attacks and consequences.
- Based out of Canada
- International Presence:
  - Europe
  - North America

Goals?

## Goals?

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- **Primary:** deliver a protection mechanism that can compete against the continuously evolving DDoS landscape, across all performance metrics. Including number of packets per second (pps) mitigated, latency, scalability and upgradeability.
- **Secondary:** increase the accessibility to industrial level DDoS mitigation technology in terms of affordability. Through the integration of advanced software with commodity hardware.
- **Tertiary:** provide on-site protection. Liberating clients from 3<sup>rd</sup> party protection mechanisms that increase exposure to security risks and degrade network performance. Maintaining data control and integrity.

Why?

## Why?

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- **Because:** at Nimitz we recognize the value of data and the damage that a DDoS attack can cause. We understand that when you are hit by an attack there are immediate and unforeseen consequences that transcend beyond that moment.

↓ Brand Recognition

↑ Cost of Remediation

↓ Customer Service

↓ Customer Loyalty

↓ Employee Productivity

↓ Employee Jobs

↑ Cost for Additional IT Security

↑ Cost of Data

↑ Physical Cost of maintaining/  
replacing damaged  
infrastructure

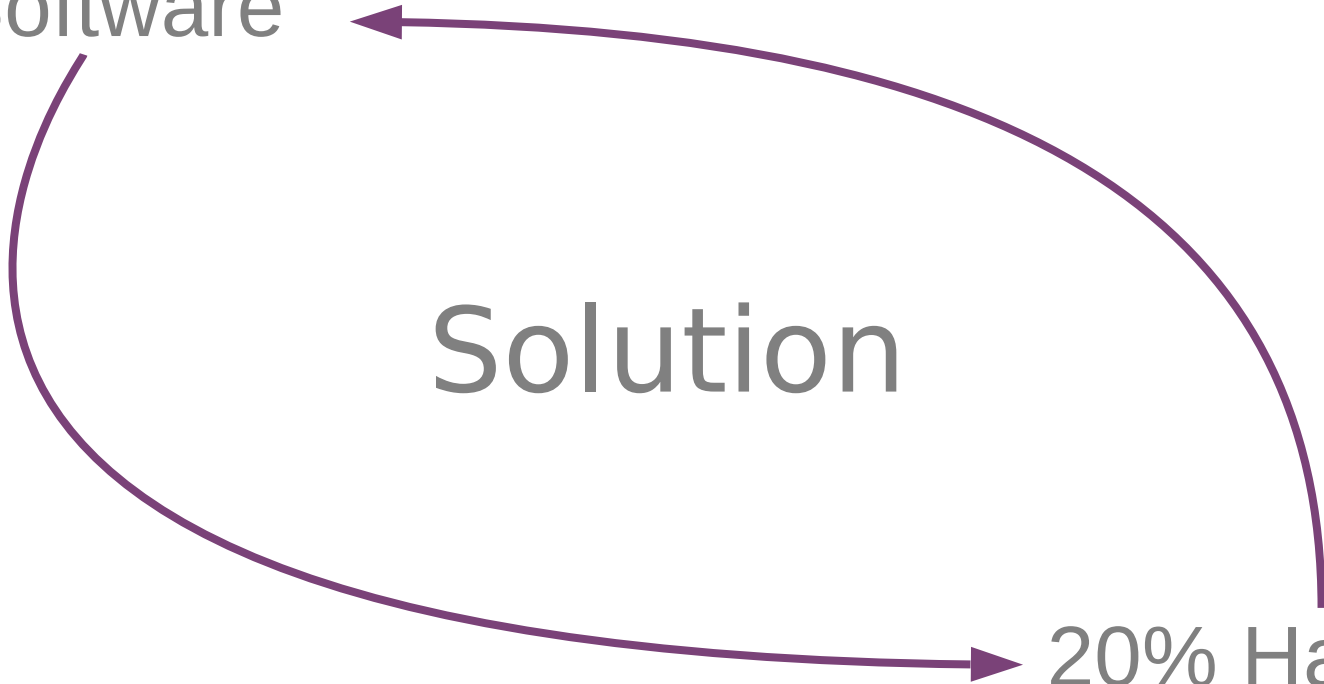
↑ Vulnerability



80% Software

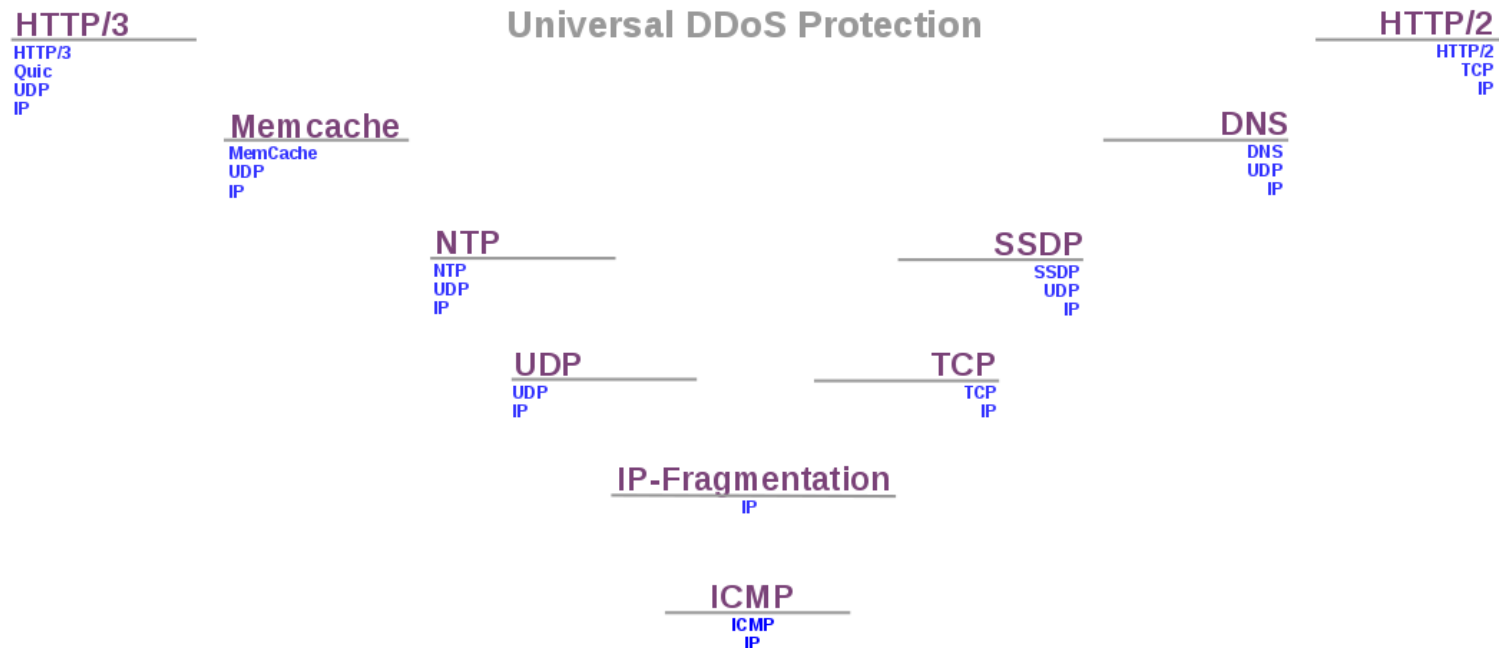
Solution

20% Hardware



## Software

- **Accelerated Packet Processing:** shifts packet processing from kernel space to user space allowing for increased concurrency.



- **Passive Precision Filtering:** combining *STATELESS* packet forwarding with *NOVEL SIGNATURE DETECTION* and *LIMITING* at layers 3/4 of the (OSI) model. Thus eliminating attacks at layers 3/4/7.

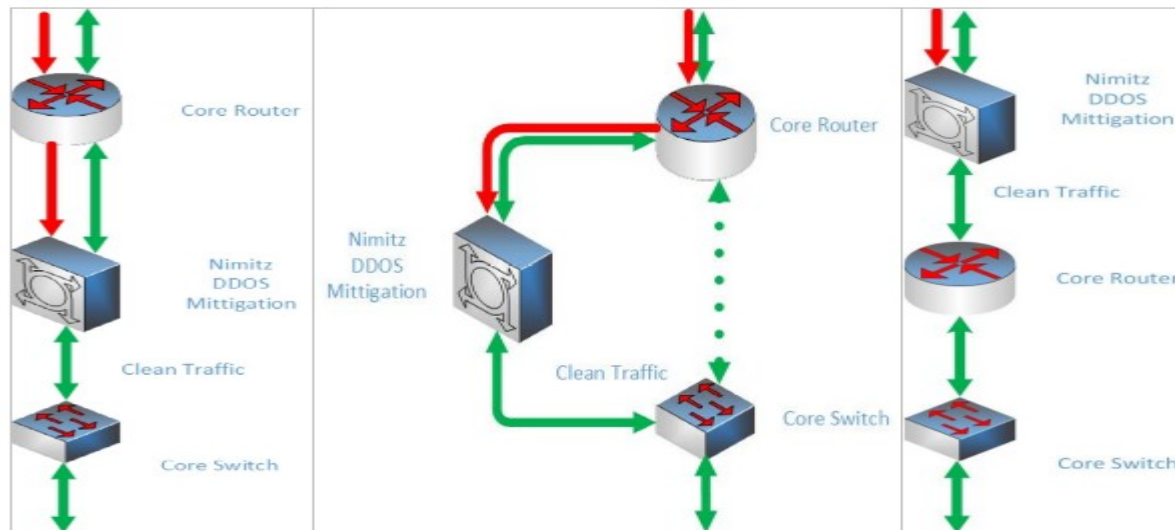
## Software

Automatic	24/7/365, No human intervention
Direction of Mitigation	Ingress (In-Bound)
Latency	Less than <200 microseconds, (0.2 milliseconds)
Response	Nanosecond timescale

- **Continued Development:** in cases where new attacks are developed. All Nimitz units will be automatically updated with the new signature following its capture and analysis.
- **Scalability:** Nimitz is primarily a software based solution. Therefore nearly unlimited scalability can be achieved through nothing more than the upgrading of physical hardware that runs our proprietary software.
- **Over Provisioned:** Nimitz units come with an approved mitigation threshold when appropriately selected for a given network. Which they are capable of exceeding by as much as ~75% for short bursts. \*Performance will vary with network loads, type of traffic.

## Hardware

- **Commodity Hardware:** reduces manufacturing related costs and increases accessibility to industrial level DDoS protection.
- **Flexible Deployment:**



## Hardware

	<u>Total Bandwidth</u>	<u>Total Throughput</u>	<u>Form Factor</u>
Default	6 (6 x 1 Gbps)	3 / 3 Gbps	RJ-45, Copper
Additional Modules	+ 4 (4 x 1 Gbps)	+ 2 / 2 Gbps	RJ-45, Copper
	+ 8 (8 x 1 Gbps)	+ 4 / 4 Gbps	RJ-45, Copper
Network Interface	+ 20 (1 x 10Gbps)	+ 10 / 10 Gbps	SFP+
Cards --> INTEL	+ 40 (4 x 10 Gbps)	+ 20 / 20 Gbps	SFP+

- **Modular:** customize your unit, to suit your network needs and provision for the future.



- **High Quality:** all products are manufactured by **Lanner**, a world leader in manufacturing of advanced network appliances. And assembled in both their Canadian and United States facilities.

# Customer

## Customer

- **Additional Features:**

Attack Notifications	Email	SMS
Logging	Full History Logs	24 Hour Windows
Real-Time Analytics	60 Second Sample Rate	1 Hour Window

- **Configuration:** similar to CISCO IOS, well documented.

Connect	Telnet, Port 2601 (Zebra)
Routing Suite	Quagga: Zebra Routing Manager
Routing Type	Static Routing

- **Packets Per Second (PPS) Level Protection:**  
pps, serve as a more robust measure for DDoS mitigation. Allowing for greater predictability of ones current and future needs.

## Customer

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- **Consultation:** provide expert opinion on hardware selection.
- **Incident Reponse:** Strong Service Level Agreement (SLA) for corporate clients.
- **Initial Start-up Cost:** the cost of purchasing the physical hardware.
- **SAAS:** (software as a service), software is provided via cloud in the form of a low monthly/ annual fee.
- **Warranty:** 1 year manufacturers hardware warranty.



*Further Information:*

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- **Please Visit:** [nimitz.wiki](http://nimitz.wiki)
- **Contact:** [info@nimitz.ca](mailto:info@nimitz.ca)



Partnered With:

