IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WSOU INVESTMENTS, LLC d/b/a BRAZOS LICENSING AND DEVELOPMENT, Plaintiff, v. DELL TECHNOLOGIES INC., DELL INC., EMC CORPORATION, AND VMWARE, INC. Defendants.	§ § § § § § § § § § § §	CIVIL ACTION NO. 6:20-cv-417 **JURY TRIAL DEMANDED**

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff WSOU Investments, LLC d/b/a Brazos Licensing and Development ("Brazos" or "Plaintiff"), by and through its attorneys, files this Complaint for Patent Infringement against Dell Technologies Inc., Dell Inc., EMC Corporation, and VMWare, Inc. (collectively, "Defendants") and alleges:

NATURE OF THE ACTION

1. This is a civil action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. §§ 1, et seq., including §§ 271, 281, 284, and 285.

THE PARTIES

2. Brazos is a limited liability corporation organized and existing under the laws of Delaware, with its principal place of business at 605 Austin Avenue, Suite 6, Waco, Texas 76701.

3. On information and belief, defendant Dell Technologies Inc. ("Dell") is a Delaware corporation with a principal place of business at One Dell Way, Round Rock, Texas 78682.

4. On information and belief, defendant Dell Inc. is a Delaware corporation with a principal place of business at One Dell Way, Round Rock, Texas 78682. Dell Inc. is wholly owned by its corporate parent, Dell.

5. On information and belief, defendant EMC Corporation ("EMC") is a Massachusetts corporation with a principal place of business at One Dell Way, Round Rock, Texas 78682. EMC Corporation is wholly owned by its corporate parent, Dell Technologies Inc.

6. Upon information and belief, VMware, Inc. ("VMWare") is a Delaware corporation with two established places of business in this District, including two in Austin, Texas with over 700 employees.

7. Upon information and belief, VMWare was acquired by EMC in 2004 and conducted an initial public offering of Class A common stock in August 2007. On or around September 2016, Dell acquired by EMC. As a result, EMC became a wholly-owned subsidiary of Dell, and VMWare became an indirectly-held, majority-owned subsidiary of Dell. Under the rules of the New York Stock Exchange, VMWare is a controlled company. As of January 31, 2020, Dell controlled approximately 80.9% of VMWare's outstanding common stock, including 31 million shares of its Class A common stock and all of it Class B common stock.

JURISDICTION AND VENUE

8. This is an action for patent infringement which arises under the Patent Laws of the United States, in particular, 35 U.S.C. §§ 271, 281, 284, and 285.

9. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a).

10. This Court has specific and general personal jurisdiction over each defendant pursuant to due process and/or the Texas Long Arm Statute, because each defendant has committed

acts giving rise to this action within Texas and within this judicial district. The Court's exercise of jurisdiction over each defendant would not offend traditional notions of fair play and substantial justice because each defendant has established minimum contacts with the forum. For example, on information and belief, each defendant has committed acts of infringement in this judicial district, by among other things, selling and offering for sale products that infringe the asserted patent, directly or through intermediaries, as alleged herein.

11. Venue in the Western District of Texas is proper pursuant to 28 U.S.C. §§1391 and/or 1400(b). Each defendant has established places of business in the Western District of Texas. Each defendant is registered to do business in Texas. Upon information and belief, each defendant has transacted business in this District and has committed acts of infringement in this District.

COUNT ONE - INFRINGEMENT OF U.S. PATENT NO. 7,539,133

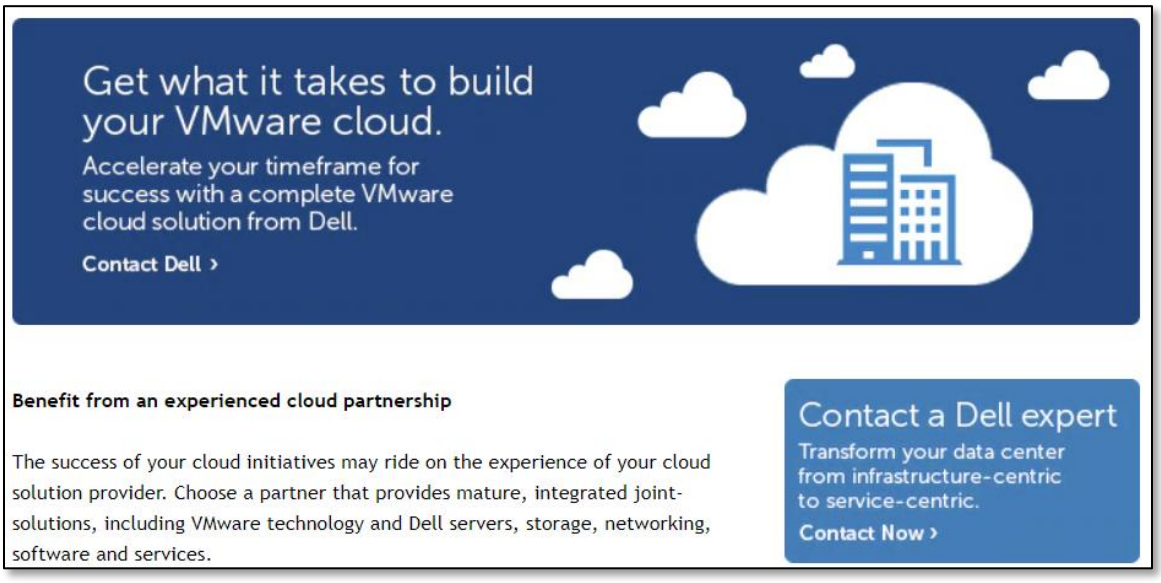
12. Brazos re-alleges and incorporates by reference the preceding paragraphs of this Complaint.

13. On May 26, 2009, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,539,133 ("the '133 Patent"), entitled "Method and Apparatus for Preventing Congestion in Load-Balancing Networks." A true and correct copy of the '133 Patent is attached as Exhibit A to this Complaint.

14. Brazos is the owner of all rights, title, and interest in and to the '133 Patent, including the right to assert all causes of action arising under the '133 Patent and the right to any remedies for the infringement of the '133 Patent.

15. Defendants make, use, sell, offer for sale, import, and/or distribute in the United States, including within this judicial district, products such as, but not limited to, cloud-related solutions, including but not limited to, devices incorporating VMware's VeloCloud solutions and

SD-WAN software, such as Dell EMC SD-WAN Edge 600 series products (collectively, the "Accused Products").



https://www.dell.com/learn/us/en/15/solutions/vmware-vcloud

https://www.delltechnologies.com/en-us/networking/sd-wan-solution/index.htm

16. The Accused Products can provide a cloud network service solution enabling sites to deploy enterprise-grade access to legacy and cloud applications over both private networks and

Internet broadband. Cloud-delivered Software-Defined Wide-Area-Network (SD-WAN) aids enterprise and cloud application performance over Internet and hybrid WAN.

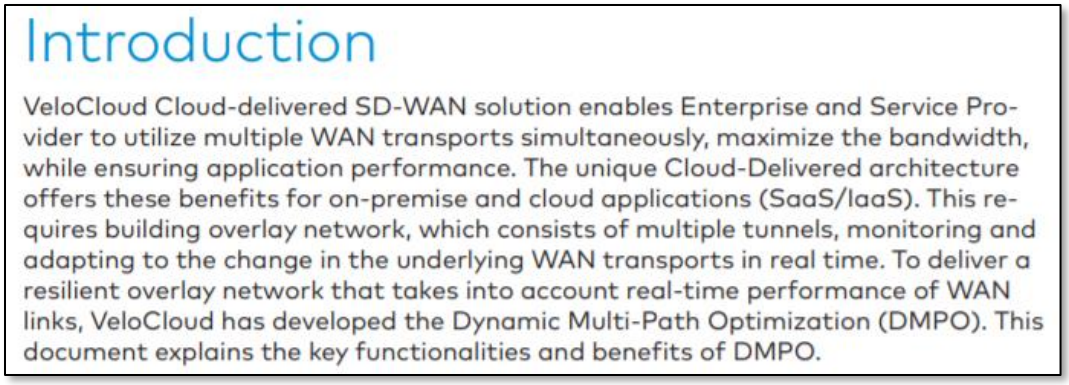
> This section provides an overview of VeloCloud.
>
> Cloud-delivered Software-defined WAN from VeloCloud assures enterprise and cloud application performance over Internet and hybrid WAN while simplifying deployments and reducing costs.
>
> VeloCloud is a cloud network service solution enabling sites to quickly deploy Enterprise grade access to legacy and cloud applications over both private networks and Internet broadband. The following figure

https://docs.vmware.com/en/VMware-SD-WAN-by-VeloCloud/3.3/velocloud-admin-guide-33.pdf

17. The Accused Products have a variety of features and capabilities including Dynamic Multipath Optimization (DMPO) technology. VMware SD-WAN processing of traffic flows at a node in a network can provide packet level redirection, which allows one or multiple physical WAN links to be abstracted and virtualized packet-by-packet. Path selection and remediation techniques can be applied in virtually real-time. Dynamic load-sharing maintains end-customer application performance quality, regardless of the reliability or consistency of the individual physical link.

> Dell deploys VMware SD-WAN Gateways as part of its overall SD-WAN platform, managing all sites on its network and eliminating any latency that may occur. Using VMware SD-WAN Dynamic Multi-Path Optimization (DMPO), Dell no longer has to manage traffic routes on the network or troubleshoot sub-par connections. Additionally, VMware SD-WAN captures data on users and traffic patterns so that Dell IT administrators can analyze it to determine what type of transport and bandwidth is necessary based on the branch location.

https://www.velocloud.com/content/dam/digitalmarketing/velocloud/en/documents/case-study-dell-emc.pdf

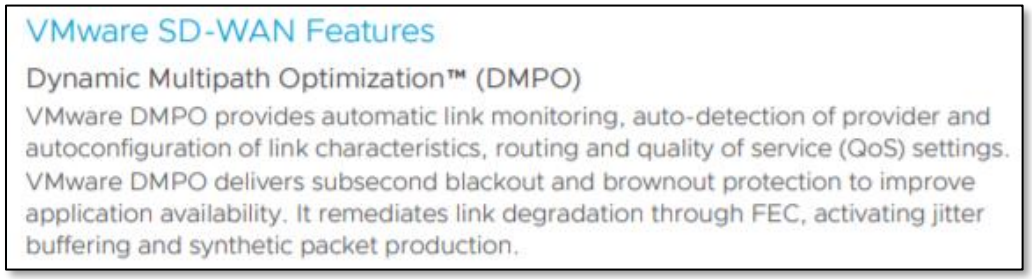


Introduction

VeloCloud Cloud-delivered SD-WAN solution enables Enterprise and Service Provider to utilize multiple WAN transports simultaneously, maximize the bandwidth, while ensuring application performance. The unique Cloud-Delivered architecture offers these benefits for on-premise and cloud applications (SaaS/IaaS). This requires building overlay network, which consists of multiple tunnels, monitoring and adapting to the change in the underlying WAN transports in real time. To deliver a resilient overlay network that takes into account real-time performance of WAN links, VeloCloud has developed the Dynamic Multi-Path Optimization (DMPO). This document explains the key functionalities and benefits of DMPO.

https://partners.lantelligence.com/wp-content/uploads/2018/07/dmpo-brief.pdf

18. VMware DMPO provides automatic link monitoring, auto-detection of provider and autoconfiguration of link characteristics, routing, and quality of service (QoS) settings. VMware DMPO delivers sub-second blackout and brownout protection to improve application availability. VMware DMPO remediates link degradation through forward error correction (FEC), jitter buffering activation, and synthetic packet production.



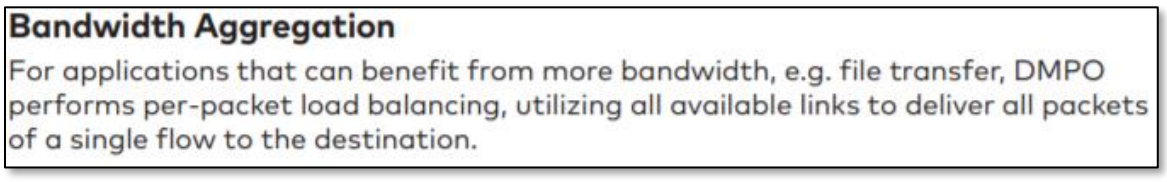
VMware SD-WAN Features

Dynamic Multipath Optimization™ (DMPO)

VMware DMPO provides automatic link monitoring, auto-detection of provider and autoconfiguration of link characteristics, routing and quality of service (QoS) settings. VMware DMPO delivers subsecond blackout and brownout protection to improve application availability. It remediates link degradation through FEC, activating jitter buffering and synthetic packet production.

https://www.velocloud.com/content/dam/digitalmarketing/velocloud/en/documents/brief-solution-overview.pdf

19. DMPO performs per-packet load balancing for SD-WAN networks.

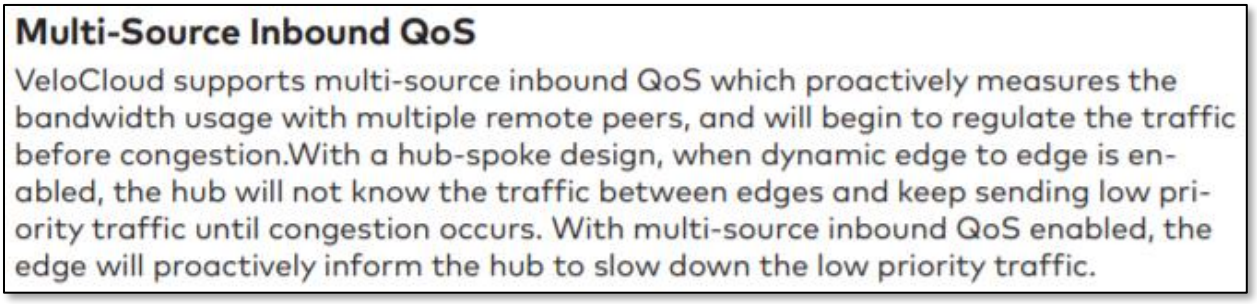


Bandwidth Aggregation

For applications that can benefit from more bandwidth, e.g. file transfer, DMPO performs per-packet load balancing, utilizing all available links to deliver all packets of a single flow to the destination.

https://partners.lantelligence.com/wp-content/uploads/2018/07/dmpo-brief.pdf

20. Nodes may have a hub-spoke design with a hub and multiple spokes. Traffic flow may be received at the hub and may be transmitted to various spokes. When dynamic edge-to-edge is enabled, the hub will not know the traffic between edges and may keep sending low priority traffic until congestion occurs. As congestion conditions are detected, with multi-source inbound QoS enabled, the edge will proactively inform the hub to slow down the low priority traffic.

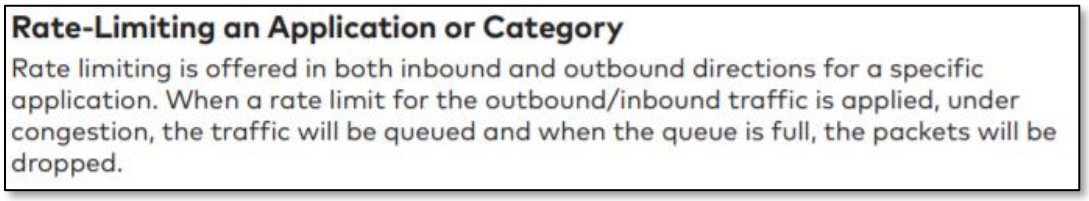


Multi-Source Inbound QoS

VeloCloud supports multi-source inbound QoS which proactively measures the bandwidth usage with multiple remote peers, and will begin to regulate the traffic before congestion.With a hub-spoke design, when dynamic edge to edge is enabled, the hub will not know the traffic between edges and keep sending low priority traffic until congestion occurs. With multi-source inbound QoS enabled, the edge will proactively inform the hub to slow down the low priority traffic.

https://partners.lantelligence.com/wp-content/uploads/2018/07/dmpo-brief.pdf

21. Under congestion, the traffic in the Accused Products will be queued. When the queue is full, packets are dropped.



Rate-Limiting an Application or Category

Rate limiting is offered in both inbound and outbound directions for a specific application. When a rate limit for the outbound/inbound traffic is applied, under congestion, the traffic will be queued and when the queue is full, the packets will be dropped.

https://partners.lantelligence.com/wp-content/uploads/2018/07/dmpo-brief.pdf

22. The Accused Products may also provide an enhanced QoS feature called Business Policy. Based on this Business Policy configuration, the Accused Products examine the traffic being used (whether congestion condition exists or not) and identify the application behavior and

the Edge WAN Link conditions. Based on this, the Business Policy optimizes application behavior driving queuing, bandwidth utilization, link steering, and the mitigation of network errors.

> The VeloCloud provides an enhanced Quality of Service feature called Business Policy. This feature is defined using the **Business Policy** tab in a Profile (or at the Edge override level).

https://docs.vmware.com/en/VMware-SD-WAN-by-VeloCloud/3.3/velocloud-admin-guide-33.pdf

> Based on the business policy configuration, the VeloCloud examines the traffic being used, identifies the Application behavior, the business service objective required for a given app (High, Med, or Low), and the Edge WAN Link conditions. Based on this, the Business Policy optimizes Application behavior driving queuing, bandwidth utilization, link steering, and the mitigation of network errors.

https://docs.vmware.com/en/VMware-SD-WAN-by-VeloCloud/3.3/velocloud-admin-guide-33.pdf

23. In view of preceding paragraphs, each and every element of at least claim 1 of the '133 Patent is found in the Accused Products.

24. Defendants continue to directly infringe at least one claim of the '133 Patent, literally or under the doctrine of equivalents, by making, using, selling, offering for sale, importing, and/or distributing the Accused Products in the United States, including within this judicial district, without the authority of Brazos.

25. Defendants have received notice and actual or constructive knowledge of the '133 Patent since at least the date of service of this Complaint.

26. Since at least the date of service of this Complaint, through its actions, Defendants have actively induced product makers, distributors, retailers, and/or end users of the Accused Products to infringe the '133 Patent throughout the United States, including within this judicial district, by, among other things, advertising and promoting the use of the Accused Products in various websites, including providing and disseminating product descriptions, operating manuals,

and other instructions on how to implement and configure the Accused Products. Examples of such advertising, promoting, and/or instructing include the documents at:

- https://www.vmware.com/company/acquisitions/velocloud.html
- https://www.dell.com/learn/us/en/15/solutions/vmware-vcloud
- https://www.delltechnologies.com/en-us/networking/sd-wan-solution/index.htm
- https://www.dell.com/en-us/work/shop/povw/sd-wan-edge-600
- https://partners.lantelligence.com/wp-content/uploads/2018/07/dmpo-brief.pdf
- https://docs.vmware.com/en/VMware-SD-WAN-by-VeloCloud/3.3/velocloud-admin-guide-33.pdf
- https://www.velocloud.com/content/dam/digitalmarketing/velocloud/en/documents/brief-solution-overview.pdf

27. Since at least the date of service of this Complaint, through its actions, Defendants have contributed to the infringement of the '133 Patent by having others sell, offer for sale, or use the Accused Products throughout the United States, including within this judicial district, with knowledge that the Accused Products infringe the '133 Patent. The Accused Products are especially made or adapted for infringing the '133 Patent and have no substantial non-infringing use. For example, in view of the preceding paragraphs, the Accused Products contain functionality which is material to at least one claim of the '133 Patent.

JURY DEMAND

Brazos hereby demands a jury on all issues so triable.

REQUEST FOR RELIEF

WHEREFORE, Brazos respectfully requests that the Court:

(A) Enter judgment that Defendants infringe one or more claims of the '133 Patent literally and/or under the doctrine of equivalents;

(B) Enter judgment that Defendants have induced infringement and continue to induce infringement of one or more claims of the '133 Patent;

(C) Enter judgment that Defendants have contributed to and continue to contribute to the infringement of one or more claims of the '133 Patent;

(D) Award Brazos damages, to be paid by Defendants in an amount adequate to compensate Brazos for such damages, together with pre-judgment and post-judgment interest for the infringement by Defendants of the '133 Patent through the date such judgment is entered in accordance with 35 U.S.C. § 284, and increase such award by up to three times the amount found or assessed in accordance with 35 U.S.C. § 284;

(E) Declare this case exceptional pursuant to 35 U.S.C. § 285; and

(F) Award Brazos its costs, disbursements, attorneys' fees, and such further and additional relief as is deemed appropriate by this Court.

Dated: May 21, 2020

Respectfully submitted,

/s/ James L. Etheridge
James L. Etheridge
Texas State Bar No. 24059147
Ryan S. Loveless
Texas State Bar No. 24036997
Travis L. Richins
Texas State Bar No. 24061296
ETHERIDGE LAW GROUP, PLLC
2600 E. Southlake Blvd., Suite 120 / 324
Southlake, Texas 76092
Telephone: (817) 470-7249
Facsimile: (817) 887-5950
Jim@EtheridgeLaw.com
Ryan@EtheridgeLaw.com
Travis@EtheridgeLaw.com

COUNSEL FOR PLAINTIFF