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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

ARISTA NETWORKS, INC.,
 	
    Plaintiff,
 	
    v.
 	
CISCO SYSTEMS, INC.,
 	
    Defendant.
	Case No. 5:16-cv-00923
	
	COMPLAINT FOR ANTITRUST AND UNFAIR COMPETITION
	
	DEMAND FOR JURY TRIAL
	
	Date Filed: February 24, 2016
	
	Trial Date: Not Set.

REDACTED VERSION OF DOCUMENT SOUGHT TO BE SEALED

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I.   NATURE OF THE ACTION

3   1.   Plaintiff Arista Networks, Inc. ("Arista") brings this action against Defendant

4 Cisco Systems, Inc. ("Cisco") under Section 2 of the Sherman Act, 15 U.S.C. § 2, and

5 California's Unfair Competition Law, Cal. Bus. & Prof. Code § 17200 *et seq*.

6   2.   This case is about Cisco's "at all costs" strategy to suppress competition and

7 maintain its hegemony in the data center. Arista knows from experience that vigorous

8 competition is the fulcrum of the economy. Indeed, it is Arista's innovations that are helping to

9 transform the data center, benefitting key sectors of the economy such as "cloud computing."

10   3.   But Cisco, realizing that it is being out-competed and out-innovated by a far

11 smaller competitor, has resorted to a scheme of anticompetitive conduct to retain its monopoly

12 in the data center. Cisco knows what is at stake. ███████████████████████████

13 ██

14 ███ Cisco

15 therefore has embarked on a scheme, ███████████████████████████████████████

16 ██████████████████████████████ *see* Ex. A, in its effort to maintain its

17 monopoly by improperly and illegally foreclosing Arista and others from competing effectively

18 in the market.

19   4.   Cisco's illegal and anticompetitive conduct, detailed below, is the last resort of

20 an incumbent monopolist who fears competition from more innovative firms that threaten that

21 monopoly. Its goal and effect is to maintain Cisco's monopoly by improperly foreclosing

22 customers from accessing rival products, locking those customers into Cisco's legacy

23 technology, in a world where – absent the lock-in – the customer would prefer to choose more

24 innovative products from other firms. Cisco has also leveraged the pricing of after-market

25 services that only it can provide, using its massive installed base to drive customers away from

26 choosing its more efficient and technologically superior competitor Arista for new products.

27 Upon information and belief, Cisco has induced Arista's business partners to cease doing

28 business with Arista in the United States in an effort to perpetuate and increase its monopoly

power. Cisco's illegal conduct has harmed, and unless stopped will continue to harm,

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competition in the market for Ethernet switches. And customers are the ultimate losers, because they end up with a poorer alternative as a result of Cisco's manipulation. This action seeks to remedy that problem and restore competition to the data center.

II.   THE PARTIES

5.   Plaintiff Arista is a corporation organized and existing under the laws of Delaware, having its principal place of business at 5453 Great America Parkway, Santa Clara, CA 95054.

6.   On information and belief, Defendant Cisco is a corporation organized and existing under the laws of California, having its principal place of business at 170 West Tasman Drive, San Jose, CA 95134.

III.   JURISDICTION AND VENUE

7.   This Court has subject matter jurisdiction under 28 U.S.C. § 1337 (commerce and antitrust regulation) and 28 U.S.C. § 1331 (federal question), as this action arises under Section 2 of the Sherman Act, 15 U.S.C. § 2, and Section 16 of the Clayton Act, 15 U.S.C. § 26.

8.   This Court has supplemental subject matter jurisdiction of the pendent state law claims under 28 U.S.C. § 1367.

9.   Venue is proper in this District because Defendant Cisco has its principal place of business in this District and is subject to personal jurisdiction in this District. In addition, venue is proper because Cisco's unlawful conduct occurred and was masterminded by senior Cisco executives in this District, and because Arista has suffered harm in this District.

IV.   INTERSTATE COMMERCE

10.   The acts complained of herein have occurred within the flow of, and have substantially affected, interstate trade and commerce.

V.   BACKGROUND FACTS

A.   Ethernet Switches

11.   For nearly two decades, Cisco has dominated the market for Ethernet switches. Ethernet switches connect computers, servers, storage and other devices together to form a

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1   network. These switch-controlled networks are connected through routers (another product in

2   which Cisco has long-entrenched dominance) to form the Internet.

3   12.   It is hard to overstate the importance of Ethernet switches and routers to modern

4   communications. As Cisco itself has explained, "switches and routers are the building blocks

5   for *all business communications*, from data to voice and video to wireless access." (Hereinafter,

6   emphasis in quotations is added unless otherwise noted). Without Ethernet switches, most

7   modern businesses of any size would be unable to operate. Even more importantly, continued

8   advances in Internet-based technologies, such as services provided "in the cloud," depend on

9   continued rapid advances in switch innovation.

10   13.   Cisco is a monopolist in the approximately $23 billion global market for

11   Ethernet switches as well as the $10 billion U.S. Ethernet switch market. Its sales and market

12   shares are approximately thirteen times its closest switch competitors in North America, and 5.5

13   times its Ethernet switch competitors globally.

14   14.   Cisco has maintained its market dominance for at least fifteen years, with global

15   and U.S. market shares usually exceeding 65% (and often above 70%), with no competitor ever

16   achieving more than an 11% share (and only one above 4%). Analysts frequently have referred

17   to the competitors in the Ethernet switch space as "Cisco and the seven dwarfs."

18   15.   Cisco publicizes the fact that it occupies the #1 position in major networking

19   products (such as for Enterprise routing, wireless LAN, and telepresence in addition to Ethernet

20   switches). That overall network-product dominance provides a significant barrier to entry into

21   the global and U.S. markets for all Ethernet switches.

22   16.   Ethernet switches operate at various speeds, and Ethernet switches operating at

23   the highest speeds are referred to as *high-speed* Ethernet switches. High-speed Ethernet

24   switches are used for, *e.g.*, data centers and cloud services. As explained in detail below, Cisco

25   has monopolized the global and U.S. markets for all Ethernet switches, and also monopolized

26   the global and U.S. markets for the narrower category of Ethernet switches referred to as high-

27   speed Ethernet switches.

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17.   Over the last several years, the global and U.S. markets for high-speed Ethernet switches have grown several times faster than the global and U.S. markets for all Ethernet switches. Cisco has maintained its dominance in the markets for high-speed Ethernet switches as well, with revenues and shares six times greater than its closest competitors. Cisco consistently and for a long time has maintained a revenue share in excess of 70% for the high-speed Ethernet switch markets, dipping just below that mark (to 66%) for the first time recently. As discussed below, the markets for all Ethernet switches (both global and U.S.) and high-speed Ethernet switches (both global and U.S.) have substantial barriers to entry, which have allowed Cisco's dominance to remain unchallenged. Cisco has enjoyed the ability to exclude rivals in these markets, and as discussed below, has taken and is continuing to take anticompetitive actions to preclude competitors who seek to overcome its monopoly power.

18.   Arista, which was founded in 2004 and released its first product in 2008, has pioneered a revolutionary approach to scalable, high-speed Ethernet switches that today are being used in data centers of companies that provide financial services, social media, e-commerce, cloud computing, and scientific computing, as well as in many government agencies. Cisco has sought to eliminate the competitive threat that Arista poses by leveraging Cisco's monopoly power, rather than by competing on the merits with better or cheaper products.

19.   Cisco's own competitive analyses confirm the threat Arista poses to Cisco. ███

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███ *See*

Ex. C. As one senior Cisco employee put it, "Arista is truly an amazing company," and Arista's founder is "a genius" whom "Cisco should fear whenever he treads nearby." *See* Ex. B.

B.   Cisco's Attempt – and Failure – to Develop its Own "Arista killer" Technology

20.   In response to this competitive threat, Cisco has repeatedly tried, and failed, to counter Arista's innovation and market success. For example, in 2012, Cisco formed a "spin-in" called Insieme Networks ("Insieme"), comprised of Cisco engineers, for the express purpose of trying to develop what Cisco's CEO John Chambers described as an "Arista killer" line of

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1   products. Cisco funded Insieme with over $100 million in 2012, and then spent over $800

2   million as part of its official spin-in into Cisco in 2013. Insieme heavily recruited Arista

3   engineers with high-priced contracts before its spin-in into Cisco. Arista, however, has

4   continued to innovate, and although Cisco spent nearly one billion dollars on Insieme, it failed

5   to become the "Arista killer" that Cisco had hoped.

6   21.   Having failed to slow Arista in the marketplace, Cisco has resorted to other

7   tactics to preserve its longstanding Ethernet switch and high-speed Ethernet switch monopolies.

8   For example, ███

9   ██████████████ *see* Ex. C, █████████████████████████████████

10 ███   That

11 strategy also failed, and Arista successfully launched its IPO in 2014.

12   22.   Unable to slow Arista through competition on the merits, Cisco has now turned

13 to anticompetitive conduct that includes an effort to turn customers' own investments in the

14 management of their networks into a trap that locks them into purchasing only Cisco Ethernet

15 switches, including high-speed Ethernet switches; and a pricing scheme that punishes Cisco

16 customers by increasing the cost they must pay to maintain and service their network if they

17 purchase from rivals. These claims address each anticompetitive scheme in more detail below.

18   **C.   Command Line Interface: Cisco's Anticompetitive Scheme to Forestall
           Competition**

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20   23.   Hundreds of thousands of network engineers have spent months, if not years,

21 learning how to configure and control Ethernet switches by entering text commands into the

22 "command line interface," or "CLI," that instruct the switches to perform specific functions. In

23 aggregate, they have spent millions of person-years actually working on networks with Ethernet

24 switches configured and controlled by CLI commands. These text commands are similar to

25 those used on early PCs running operating systems such as Microsoft DOS. Unlike later PCs,

26 which can now be controlled using operating systems with "graphical" user interfaces and

27 virtual buttons (such as "print"), Ethernet switches require network engineers to use many more

28 commands than can be handled through graphical controls. Consequently, network engineers

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1   who manage networks of switches must still either manually enter their commands into the CLI,

2   or write programs (called "scripts") that automate strings of commands.

3   24.   CLIs have existed since the 1960s, long before Cisco was founded as a

4   company, and CLI commands were used with the first operating systems such as TOPS-10,

5   TENEX, and UNIX. Upon information and belief, when Cisco developed its first Ethernet

6   switches, it drew from CLI commands already used with these and other operating systems. For

7   example, Cisco's internal documents acknowledge that TOPS-20, another pre-existing operating

8   system, was a basis for CLI commands used with Cisco switches. And Cisco also appears to

9   have derived numerous CLI commands from pre-existing technical standards. The reason was

10   simple: because the purpose of CLI commands is to make Ethernet switch monitoring and

11   configuration as easy as possible for network engineers, Cisco had a strong incentive to use

12   commands with which engineers were already familiar.

13   25.   As Cisco's documents confirm, Cisco knew that the CLI commands it used had

14   become widely familiar to network customers between 1993 and 2000, and that "customers ha[d

15   made a] huge investment" in learning those commands and incorporating them into scripts. *See*

16   Ex. D. This was no accident. For over a decade, Cisco has represented to customers that the

17   CLI commands it used were "industry standard," thus assuring customers that their investments

18   in learning the commands and writing scripts that incorporate them would not lock the

19   customers into using Cisco's products, because the same commands could be used to operate

20   other vendors' switches. Cisco also repeatedly referenced CLI commands with other

21   technologies such as Simple Network Management Protocol ("SNMP") and Extensive Markup

22   Language ("XML") that have been adopted by standard-setting organizations.

23   26.   Cisco greatly benefited from its representations that its operating systems used

24   "industry standard" CLI commands, because Ethernet switches can last for ten years or more,

25   and most customers purchase them incrementally over time. By representing to actual and

26   potential customers that Cisco Ethernet switches could be controlled using "industry standard"

27   CLI commands, Cisco assured customers that they could undertake significant investment in the

28   CLI by writing scripts using standard CLI commands, training their network engineers in CLI

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1   commands, and hiring network engineers principally trained in standard CLI commands, while

2   remaining free to purchase the Ethernet switches that best suited their needs from different

3   vendors. This option was important to customers because they participate in a sector where

4   innovation has been rapid and data center performance can be critical to their own ability to

5   compete. Cisco therefore benefited by making it clear to customers and the industry that it

6   considered "industry standard" CLI commands used in Cisco's operating systems to be an open

7   utility.

8   27.   Cisco knew that its representations also had the effect of inducing other Ethernet

9   switch competitors, when they entered the global and U.S. markets for all Ethernet switches and

10   high-speed Ethernet switches, to use "industry standard" CLI commands. Indeed, ████

11   ██

12   ██ *See*

13   Ex. F. And Cisco knew that its competitors such as Dell were marketing their Ethernet switches

14   to customers as using "industry standard CLI" and being "[i]nteroperable with Cisco

15   environments." *See* Ex. E. ████████████████████████████████████

16   ████████████████████████████████████ *see* Ex. F, even while externally,

17   Cisco actively encouraged customers to make those investments by continuing to characterize

18   the CLI commands as "industry standard."

19   28.   Upon information and belief, these competitors, in reliance on Cisco's

20   representations, did not attempt upon entry into the market to develop an alternative set of

21   commands that could be used by customers free of intellectual property claims. Instead, by

22   adopting "industry standard" CLI commands, these competitors enhanced the benefits and use

23   of those commands in the market. Customers greatly benefited from their resulting ability to

24   use a common set of commands across multiple vendors, akin to the benefits of being able to

25   use a single language among their network engineers. Although CLI commands are not

26   innovative or valuable in and of themselves (they typically consist of common terms like

27   "show" and "set," and terms derived from technical standards), they acquire value through

28   customers' investment in them. They are numerous enough that it is time-consuming and

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1   expensive for network engineers to learn them, and having to use multiple CLIs could introduce

2   "translation"-type errors into a customer's CLI scripts that could be extremely costly to

3   customers.

4   29.   Upon information and belief, had Cisco not represented to industry participants

5   that the CLI commands it used were "industry standard," and instead asserted that those

6   commands were proprietary and usable only with Cisco switches, industry participants would

7   likely have developed and invested in alternative "industry standard" CLI commands, free from

8   intellectual property claims. They could have done so in a number of ways, including, for

9   example, through standard-setting bodies such as the Internet Engineering Task Force ("IETF").

10   Indeed, many of the functions that Cisco's now-allegedly proprietary CLI commands invoke are

11   described in IETF or other standards and are available for anyone to use. Had Cisco declared to

12   those bodies, or to competitors or customers, that it believed that the CLI commands it used to

13   invoke certain functions were proprietary to Cisco, participants would have likely defined and

14   specified alternative commands that were interoperable with multiple vendors' switches, as

15   most industry participants want.

16   30.   In sum, for more than ten years, Cisco made representations that led customers

17   and the industry to believe that Cisco either did not have or would not assert any intellectual

18   property rights claims in the CLI commands it used, such that customers could invest in those

19   commands without being locked into using Cisco's switches. As a result, industry participants

20   invested in and used CLI commands without challenging Cisco's claim of ownership over them

21   – because no such claim was made – or attempting to develop, before participants became

22   locked in, an alternative to commands Cisco claimed to own. Because, as explained above, CLI

23   commands are simple and derive their value only from widespread usage, the industry could

24   readily have developed and deployed alternatives to any command Cisco claimed to own if

25   Cisco had only laid open its intention to claim copyright protection at the time it was

26   encouraging widespread use of the commands as an "industry standard" that Cisco led

27   customers to believe they could use with other vendors' switches.

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31.   Now, in order to preserve its monopoly in the face of a real competitive threat on the merits from Arista, Cisco is trying to capitalize on the "barrier to entry" it worked to create. Cisco is reneging on its representations that the CLI is "industry standard," through which it led customers to believe that they were free to use the CLI to interoperate with other vendors' devices. Instead, Cisco seeks to claim that those CLI commands are protected by copyright and to prevent Arista from using them. As part of this overall policy change, Cisco seeks to turn customers' own investments against them. Although Arista built its own Extensible Operating System ("EOS") from the ground up, Cisco now claims that Arista software's ability simply to *understand* CLI commands *entered by Ethernet switch customers,* including high-speed Ethernet switch customers, infringes its copyright. And Cisco has never offered to license Arista to use, for a reasonable royalty, CLI commands in which Cisco claims a copyright interest.

32.   Cisco's change in policy is designed to maintain and further expand Cisco's Ethernet switch monopolies. On information and belief, Cisco recognizes that competitors and customers understood its prior representations about what constituted "industry standard" to mean that those CLI commands could operate other vendors' products so that training and scripts could be put to use with non-Cisco switches. In a recent online blog, however, Cisco's General Counsel, Mark Chandler, stated that "[t]he patented and copyrighted features and implementations [of CLI] being used by Arista are *not* industry standards" – despite more than a decade in which Cisco has described the CLI commands it uses as "industry standard." Cisco's reversal in position, ███ ██ demonstrates that it understands the problems with claiming the ability to exclude others from things that it has promoted as industry standard.

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D. **Cisco Forces Customers to Purchase Cisco Switches or Face Punishing Maintenance and Service Contract Renewals if Customers Purchase Switches from Rival Vendors**

33. ██

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████████████████████ Below is an example of one such strategy of which Arista is aware.

34.   Cisco has punished customers who seek to purchase Ethernet switches from other vendors by increasing the price it charges for the maintenance and service of its products through a program called SMARTnet. Upon information and belief, if customers purchase competitive Ethernet switches (including high-speed Ethernet switches), Cisco has charged significantly more for renewing SMARTnet maintenance and service – far more than any measure of any added cost, and as much as the total cost of a customer's potential purchase of competitive hardware and the total cost of Cisco hardware.

35.   This practice is economically coercive and raises the costs of Cisco's competitors. As noted earlier, the vast majority of Ethernet switches are sold to customers who already have an installed base of Ethernet switches running in their existing networks. Ethernet switches can last for many years, so customers typically are not looking to replace all of the switches in their network, but rather to add switches incrementally, for example in connection with the opening of a new office or data center. Because Cisco has been the dominant Ethernet switch provider for more than a decade, a customer's installed base will frequently include a substantial majority of Cisco Ethernet switches.

36.   Cisco Ethernet switch customers who want the full ability to use the equipment they have bought will also purchase maintenance and service from Cisco, because only Cisco can provide essential bug fixes, patches, and updates for software running on Cisco's products. Because customers have a substantial majority of Cisco Ethernet switches and must purchase SMARTnet service and maintenance from Cisco to realize the full value of that equipment, Cisco's threat to penalize SMARTnet customers who choose competitive Ethernet switches, including high-speed Ethernet switches, raises rivals' costs and forecloses more innovative competition, improperly maintaining Cisco's monopolies. No equally efficient rival or potential

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rival could profitably implement a counterstrategy to overcome the effects of this exclusionary conduct.

37.   The aim and effect of Cisco's overall conduct – which, upon information and belief, includes at least the actions described above – is to foreclose more innovative and efficient competitors from the global and U.S. Ethernet switch markets, and the global and U.S. high-speed Ethernet switch markets. Customers of all such products already have been paying supra-competitive prices in the market for Ethernet switches. Cisco's conduct, if permitted to continue, threatens to prevent the return of competitive prices and hinder innovation that otherwise would have occurred.

38.   The Ethernet switch market accounts for $23 billion in global commerce. Cisco's conduct has impeded competition in markets that are the backbone of our modern economy. Absent this Court's intervention, Ethernet switch customers, and ultimately global e-commerce consumers and Internet users, will pay the price of Cisco shielding itself from competition on the merits. The innovation and efficiencies introduced by Cisco's rivals may never be realized due to Cisco's exclusionary conduct. Even worse, because these markets are characterized by network effects, the resulting competitive harm would be difficult if not impossible to reverse.

39.   Arista is one of several competitors that have been improperly foreclosed. Arista released its first Ethernet switch product in 2008, and it supplies high-speed Ethernet switch customers in the United States and around the world. The inevitable effect of Cisco's overall course of conduct has been and will continue to be to hinder competition in the markets for high-speed Ethernet switches and for all Ethernet switches. The harm and damage to Arista is a direct byproduct of the overall harm to competition.

VI.   RELEVANT MARKETS AND CISCO'S MARKET POWER
A.   Ethernet Switch Markets

40.   Ethernet switches are a relevant product market. Ethernet switches are devices that control data flow within a network to enable network components to communicate efficiently. They are the fundamental building blocks of modern local area networks, deployed

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in virtually every modern business and government office. While Ethernet switches are differentiated across vendors and customer types, there is no adequate substitute technology that provides the same function and value within a network infrastructure.

41.   Routers have been a technology that is complementary to, and not a substitute for, Ethernet switches. Ethernet switches connect components to create a network, and routers allow for communication between networks. The two types of devices generally operate at different logical levels in a network: Ethernet switches transfer information in the data link layer using physical addresses for network components, whereas routers transfer packets in the Network or IP layer using virtual addresses. As technology has evolved, Ethernet switch manufacturers have begun to incorporate certain routing technologies into a single combined product. This confirms that routers are complements for Ethernet switches and not substitutes.

42.   Buyers of Ethernet switches would not be able to turn to alternative technologies in response to a monopolist's price increase above the competitive level.

43.   The geographic markets for the sale of Ethernet switches are (i) the United States and (ii) the world. The global market for Ethernet switches includes manufacturers with product portfolios that are worldwide in scope, and multinational customers that have a demand for such global capability. There is substantial industry recognition of both a global market for Ethernet switches and a narrower U.S.-only market. A hypothetical monopolist of Ethernet switches in the United States would be able to raise prices profitably over competitive levels. Correspondingly, a hypothetical monopolist of Ethernet switches globally would be able to raise prices profitably over competitive levels. In fact, Cisco itself has been able to maintain prices above competitive levels both globally and in the United States.

44.   Ethernet switch suppliers compete for sales to global customers and national customers. Accordingly, it is appropriate to analyze the competitive effects of Cisco's conduct in a global market and in the national market in which vendors compete.

45.   Cisco has monopoly power in the U.S. and global markets for Ethernet switches, consistently holding a share in excess of 65% in both markets, and protected by high barriers to entry as discussed below. Cisco's Ethernet switch sales and market shares are roughly thirteen

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times its closest switch competitors in North America, and 5.5 times its switch competitors globally. Cisco has managed to maintain this market dominance for at least fifteen years, with global and U.S. market shares usually exceeding 65% (and often above 70%), with no competitor ever achieving more than an 11% share (and only one above 4%).

B.   High-Speed Ethernet Switch Markets

46.   A narrower product market within the overall Ethernet switch market (also sometimes referred to as a submarket) is the market for high-speed Ethernet switches. Customers in this market – such as search engines, social networks using data centers, high-frequency traders, and government agencies – require Ethernet switches that are able to forward large volumes of data traffic with minimal latency, while also not dropping packets in the process. The cloud network architecture, which depends on high-speed Ethernet switches, differs from the traditional network architecture including the presence of scale-out clusters, a non-blocking design, massive data flows, workload mobility, and automatic provisioning. These cloud network characteristics, among others, motivate the need for a differentiated type of high-speed Ethernet switch.

47.   Sales of high-speed Ethernet switches are growing significantly faster than sales of all Ethernet switches as a whole due to the explosion of data volume on the Internet. This phenomenon is spurred by ever smaller and lighter consumer devices that rely on cloud storage – that is, data stored on servers to which the device connects via the Internet – for the bulk of high-speed Ethernet switch customers' storage needs.

48.   Customers that generally do not purchase high-speed Ethernet switches, particularly small and mid-sized businesses, do not process the same volume of data at the same high speeds as those used by high-speed Ethernet switch customers. In addition, high-speed Ethernet switches can be significantly more expensive than Ethernet switches used for other applications. In a world where an Internet user can easily switch from one search engine to another if search results take too long to appear, every component of a high-speed Ethernet switch customer's network must be tuned to maximize speed and quality.

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49.   Thus, customers of high-speed Ethernet switches would not be able to turn to alternative technologies – including, but not limited to, lower-speed switches – in response to a high-speed switch monopolist's price increase above the competitive level.

50.   As detailed below, extensive investment is required to provide products that meet the demands of high-speed Ethernet switch customers. Upon information and belief, many high-speed Ethernet switch customers are multinational firms that require suppliers with corresponding global capability.

51.   The geographic markets for the sale of high-speed Ethernet switches are (i) the United States and (ii) the world. A hypothetical monopolist of high-speed Ethernet switches globally would be able to raise prices profitably over competitive levels; and, correspondingly, a hypothetical monopolist of high-speed Ethernet switches in the United States would also be able to raise prices profitably over competitive levels.

52.   High-speed Ethernet switch suppliers compete for sales to global customers and national customers. Accordingly, it is appropriate to analyze the competitive effects of Cisco's conduct in a global market and in the national market in which vendors compete.

53.   Cisco has monopoly power in the high-speed Ethernet switch markets, maintaining a consistent share in excess of 70%, only dipping below 70% for the first time recently in large part due to Arista's innovation. The high-speed Ethernet switch markets also have substantial barriers to entry as discussed below.

54.   The markets for high-speed Ethernet switches and all Ethernet switch markets are collectively referred to as the "Relevant Product Markets."

C.   Switch Maintenance and Service Markets

55.   Ethernet switch customers require maintenance and service provided by Ethernet switch suppliers or third-party vendors to ensure the proper functioning of their hardware and software. The service market includes the provision of services such as onsite visits from certified engineers, software updates, technical assistance center access, online resources, and hardware replacement services. Without such maintenance services, customers could not address critical performance issues and address service problems that can be

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catastrophic to their businesses. As one example, a case study for a healthcare system customer on Cisco's website highlights the need for maintenance services that promptly address critical issues and closely monitor customer systems to mitigate potential problems proactively. There are no reasonably interchangeable substitutes for such maintenance services. The geographic markets for this service and maintenance are (i) the United States and (ii) the world. The global and U.S. markets for Ethernet switch service and maintenance are referred to as the "Relevant Service Markets."

56.   Maintenance services for Ethernet switches cannot be provided efficiently in-house by customers because they require specialized knowledge and training. In addition, customers that have previously purchased their Ethernet switches from more than one supplier (prior to the anticompetitive conduct described below, which has foreclosed competitive Ethernet switch purchases), upon information and belief, may require multiple specialized outside vendors to service their networks effectively. For instance, as discussed below, only Cisco is able to provide full maintenance and support on its switch products, thus customers must use Cisco as one of their service vendors even if they purchased switches from other vendors (again prior to the anticompetitive conduct discussed below).

57.   Thus, customers in the Relevant Service Markets would not be able to turn to alternative services, such as services provided by in-house customer IT staff, in response to a monopolist's price increase above the competitive level for necessary services such as essential bug fixes, patches, and updates for software running on Cisco hardware.

D.   Relevant Markets: Summary

58.   To summarize, the following markets are relevant markets in this case:

   a.   All Ethernet switches (both globally and limited to the United States);

   b.   The narrower market of high-speed Ethernet switches (both globally and limited to the Unites States). The markets for all Ethernet switches and the narrower market of high-speed Ethernet switches are collectively referred to as the "Relevant Product Markets"; and

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c.   Ethernet switch maintenance and service (both globally and limited to the

United States) – referred to as the "Relevant Service Markets."

VII.   BARRIERS TO ENTRY

59.   The Relevant Product Markets are characterized by high barriers to entry and expansion. There are several factors that contribute to these high entry and expansion barriers for potential new entrants and existing competitors. To begin with, the costs to develop Ethernet switch software and hardware are substantial. It requires tens of millions of dollars for initial development, and then hundreds of millions more to tailor the product to specific customer needs and to build an effective sales network. For instance, Arista has invested hundreds of millions of dollars in research and development ("R&D") to develop and bring to market its innovative Ethernet switch and EOS operating system. (The EOS operating system is the entire operating system including the millions of lines of computer code it comprises, as distinct from the command words used to interface with the operating system.)

60.   Another barrier to entry for the Relevant Product Markets lies in customers' long purchase cycles when replacing or upgrading their network components to the next technology. For example, it took approximately fifteen years for customers to widely deploy 10+ Gigabit Ethernet switches to replace 1 Gigabit Ethernet switches. These circumstances mean that competitors have limited opportunities to significantly expand their market share.

61.   As Cisco publicly promotes, it is the number one vendor for major network components often required by customers for their enterprise infrastructures – such as for Enterprise routing, wireless LAN, and telepresence – in addition to Ethernet switches. Thus, a further barrier to entry is created by the simple fact of Cisco's dominance. Given the relatively high transaction costs for customers, and the presence of bundled offerings, any new Ethernet switch entrant may need to offer a full line of network components. Alternatively, if a new entrant offers only a limited number of network components, as Arista does, those products must greatly exceed the quality of Cisco's and at a much lower price to induce a customer to switch. Cisco's conduct, which if successful would, *inter alia,* reduce the interoperability of

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1   network components from a customer perspective, only serves to further increase these already

2   very high barriers to entry.

3   62.   Cisco's anticompetitive policy changes with respect to CLI commands create a

4   particularly insurmountable barrier to entry. Cisco's claim of copyright in the CLI commands

5   entered by customers, either manually by their network engineers or automatically through

6   scripts those customers have written, forces customers who wish to use rivals' Ethernet switches

7   to either re-train their workforce and rewrite their scripts, at a cost that could easily run into the

8   millions of dollars, or forgo the ability to use competitive products.

9   63.   Cisco's lock-in and subsequent announcement to customers that its CLI

10 commands, notwithstanding its prior representations, "are *not* industry standards," has created a

11 barrier to entry regardless of whether Cisco's copyright claim is valid. The possibility of a

12 copyright-infringement claim will cause some customers to refrain from purchasing non-Cisco

13 switches that use these CLI commands. But those same customers also may not want to migrate

14 to otherwise superior and/or less expensive equipment that does not use the CLI commands over

15 which Cisco claims copyright, because of the costs involved in (i) training engineers to use

16 different command words; and (ii) operating a system that uses multiple sets of command

17 words.

18   64.   Cisco's own documents explain, with unexpected candor, why its conduct with

19 respect to CLI commands acts as a barrier to entry. As Cisco knows, its customers have made a

20 "huge investment" in CLI in reliance on Cisco's prior representations. Being forced at this late

21 date to retrain their engineers and rewrite their scripts imposes high risks on its customers. By

22 "extending and preserving that investment" through its anticompetitive conduct, Cisco

23 substantially increases barriers to entry that already exist.

24   65.   Given these barriers to entry and expansion, competition on the merits in the

25 Relevant Product Markets is critical to ensure the resulting benefits to consumers. If Cisco's

26 anticompetitive conduct is not stopped, the anticompetitive harm in the Relevant Product

27 Markets will be long term and likely irreversible.

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VIII.   CISCO'S OVERALL SCHEME OF EXCLUSIONARY ANTICOMPETITIVE CONDUCT

66.   In pursuit of its ███████████████████████ campaign against Arista, Cisco has engaged in a course of conduct that has improperly maintained its monopoly power in the Relevant Product Markets. While the following discussion identifies certain anticompetitive conduct of which Arista is aware, the law requires that the broad-ranging scheme be viewed as a whole. Moreover, upon information and belief, variations of the identified conduct will be made apparent through discovery.

A.   Cisco's Policy Reversal for the Purpose of Impeding Competition

1.   Common CLI Commands Have Been Adopted by Users for Decades

67.   A network engineer communicates with and manages an Ethernet switch through a set of words referred to as command line interface ("CLI") commands. While customers select an Ethernet switch based on its performance, reliability, operating system features, and hardware – which costs switch manufacturers tens of millions of dollars to develop and hundreds of millions to bring to market – CLI commands are simply the communication mechanism that serve to configure, monitor, and debug Ethernet switches. There is no inherent value in CLI commands; they are purely functional. But there is significant value in the widespread knowledge among network engineers of which commands to use for which features. For example, if an engineer wanted to set the time on an Ethernet switch in her datacenter, she would type the command "clock set" followed by the time desired. An alternate command – such as "clock time" – could perform this function just as well, but the fact that network engineers have been typing "clock set" for decades makes it valuable to the industry as a standard.

68.   The practice of managing computing devices through CLI commands is long established. As early as the 1960s, companies like Digital Equipment Corporation began developing operating systems for computing devices that needed to communicate with each other and with customers. Customers of such systems used a CLI for their configuration and management. For example, Digital Equipment Corporation launched its Total Operating System (TOPS-10) for its mainframe computer in 1967. Customers could manage TOPS-10 by

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using CLI commands. Not long after, the TENEX operating system was created to run on a subsequent version of Digital Equipment Corporation's mainframe computer. Like TOPS-10 before it, and the subsequent TOPS-20, TENEX was an operating system purchased by users who used CLI commands to communicate with the operating system.

69.   In the early 1970s, UNIX – another early operating system – was developed by Bell Labs (later licensed to academic and commercial third parties). Customers also interacted with the UNIX operating system through CLI commands, which continued to evolve through several versions of the operating system over the following decades.

70.   Upon information and belief, before Cisco was even in existence, users had already grown accustomed to using CLI commands so that they did not have to re-learn them each time they employed the same function on another platform.

71.   Thus, before Cisco offered its first Ethernet switch, CLI users already had accepted that CLI commands were not in any way innovative or valuable except for the fact that there was widespread knowledge of commands across users.

72.   As a result, upon information and belief, Cisco's first Ethernet switch and router products, introduced in the 1980s and early 1990s respectively, drew from commonly accepted CLI commands that were already in use wholly separate from their use with Cisco's products. According to Cisco's internal documents, for example, these commands drew from prior TOPS-20 commands. And Cisco also appears to have drawn extensively from pre-existing technical standards.

73.   As users adopted Ethernet switch technology from new competitors, they continued to use existing, commonly accepted commands already familiar to them. Moreover, as suppliers added new functionality in response to customer demand, users became familiar with CLI commands associated with that functionality. When that functionality and the associated commands are adopted widely, the latter becomes part of the body of commonly accepted commands.

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2.   Cisco's Long-Standing Policy Encouraged Reliance on Industry-Standard Commands

74.   ██

████████████████████████████ *see* Ex. G, ████████████

████████████████   For over a decade, Cisco has aggressively sold its products on the basis that the Cisco CLI commands are a widely-used "industry standard," and compared CLI to other industry standards such as SNMP and XML. As an example, Cisco has touted in its worldwide marketing materials that its products implement industry-standard commands, thereby offering customers the benefit of "enhanced end-to-end manageability." In so doing, Cisco expressly highlighted the fact that customer familiarity with these industry-standard commands has resulted in its adoption across firms, resulting in easier integration of competitors' products into a customer's network by eliminating the need to learn a completely different CLI. Cisco has also publicly noted that "[t]he Cisco IOS CLI has essentially become the standard for configuration in the networking industry." Cisco's data sheets, manuals, and other public statements told the marketplace, for instance, that Cisco's new IOS XR, could be easily managed through "industry-standard management interfaces, including a modular command-line interface (CLI), Simple Network Management Protocol (SNMP), and native Extensive Markup Language (XML) interfaces" – interfaces that are known standards within the technical community.

75.   Cisco made similar representations to a standard setting body called the Internet Engineering Task Force ("IETF"). The IETF publishes standards regarding a number of areas (including Applications, Operations and Management, Real-time Applications and Infrastructure, Routing, Security, Transport, and General Internet), and company representatives submit drafts and submissions in contribution to those standards (called, *e.g*., draft Requests for Comment ("RFCs") and Internet drafts). Cisco has made several submissions, including Internet drafts, working group emails, and draft RFCs that specifically incorporate commands that Cisco was promulgating for use within a standard. The point of using these commands in this type of industry setting has been to provide commands that would be utilized in conjunction

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1   with the standard, which has the effect of encouraging engineers to rely on an industry-standard

2   set of commands.

3   76.   All such statements were made pursuant to Cisco's policy to *encourage*

4   customers and competitors to utilize the commands incorporated into Cisco's IOS CLI, just as

5   Cisco had drawn upon pre-existing CLI commands when entering the switch market (referred to

6   hereinafter "Cisco's long-standing policy"). Thus, Cisco's long-standing policy had two

7   complementary purposes: (i) it allowed Cisco to ensure customers *ex ante* that, in choosing the

8   dominant provider, they were not locking themselves into Cisco should competitors develop

9   more innovative or efficient products that also responded to using these industry-standard

10   commands; and (ii) it forestalled other industry participants from acting in response to any

11   purported intellectual property claim by Cisco, such as by promoting and standardizing an

12   alternative CLI that Cisco would not govern.

13   77.   For over a decade, Cisco intentionally made representations about industry-

14   standard commands without qualifying those statements with any assertion of copyright or other

15   intellectual property rights in the CLI commands. On information and belief, Cisco did so

16   knowing that its statements would induce industry players to use those commands rather than

17   standardizing an alternative, and to do so without challenging any Cisco copyright claim.

18   78.   Cisco's long-standing policy did not delineate between CLI commands that

19   already had been in use for decades before Cisco even began supplying Ethernet switches and

20   the set of CLI commands adopted by the industry since that time. Nor did this policy

21   distinguish between CLI commands used in response to features introduced by Cisco or by other

22   vendors. Rather, Cisco's long-standing policy was to treat all of the CLI commands its users

23   had adopted, regardless of when users started using such commands, as "industry-standard

24   CLI." Thus, observers of Cisco's long-standing policy and its corresponding marketplace

25   statements about industry-standard CLI would reasonably infer that Cisco would not assert any

26   intellectual property rights in CLI commands.

27   79.   In reliance on Cisco's long-standing policy, when competitors such as Dell, HP,

28   Pluribus, and Enterasys entered the market in the 1990s and into the 2000s, they each

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1 specifically highlighted to customers that, while their Ethernet switches were differentiated from

2 Cisco's, engineers could still use the industry-standard commands that they had been trained to

3 use previously. In making a presentation on the viability of its software management solutions,

4 HP emphasized their products' "ease of migration and leveraging existing knowledge,"

5 including incorporation of industry-standard commands. Dell refers to an "industry-standard

6 CLI" among the features listed on the specification sheet for its Ethernet switches. In promoting

7 its MicroBlade product, Pluribus claimed that "key to the MicroBlade is the Pluribus Networks

8 Netvisor, providing a rich set of L2/L3 networking services based on an industry-standard CLI."

9 Similarly, Enterasys highlights its products' "powerful management and configuration tools –

10 including industry-standard Command Line Interface."

11   80.   Cisco was acutely aware of this adoption by rival firms.

12

13 Arista was no

14 different, as Cisco also knew.

15

16 *See* Ex. H. Cisco also knew that Arista promoted EOS as using "industry standard CLI," the

17 result of which was to benefit customers by enabling them to engage in "seamless integration

18 into network[s]," "less time spent in operational training," and "engineering awareness."

19   81.   Not only Cisco, but customers and others in the industry, knew that switch

20 competitors to Cisco used industry-standard CLI. For example, in 2010, two years after its

21 founding, Arista won an award for having the best switch in the industry – beating out Cisco –

22 according to the prominent industry publication *Network World*. Arista's switch included its

23 innovative operating system, EOS, and as *Network World* noted, customers could take

24 advantage of these improvements while using an "IOS-like CLI" to manage the switch. (Cisco

25 was acutely aware of this competitive development and, upon information and belief, Cisco took

26 adverse action against certain employees upon learning that Cisco had lost the award to Arista.)

27   82.   Notably, even when a vendor such as IBM has developed its own CLI

28 commands, it has, on information and belief, invested significant resources to incorporate an

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alternative mode into its products that is designed to emulate the CLI commands that Cisco described as industry standard. In other words, IBM customers could use an emulation mode to access the same industry-standard commands they were familiar with and had been trained upon. This is a significant and powerful phenomenon, because it further illustrates the extent to which customers and competitors relied upon Cisco's policy of encouraging use of the industry-standard commands.

83.   In reliance on these market events, as Cisco knew, customers invested millions of dollars in training network engineers to use industry-standard commands (or paying engineers already trained to do so). Becoming proficient in CLI takes approximately six to nine months for engineers working in large data centers, and a six-month period of interspersed training for smaller enterprise customers. Becoming proficient in a completely new version of CLI commands would be costly for customers because it is time-consuming.

84.   Customers also have invested significant resources in creating "scripts" – programs designed to invoke a large number of CLI commands automatically – to make Ethernet switch management for their engineers more time-efficient. For example, rather than manually configuring each Ethernet switch in a new network, an engineer might write a generic script that includes all of the necessary CLI configuration commands. The engineer can then programmatically apply the script to each switch one after the other. The use of industry-standard commands in these scripts makes them far more efficient and useful, because they can be used across competing vendors' products. Some customers have communicated that they would not consider purchasing new Ethernet switches unless they were compatible with their entire existing script infrastructure.

85.   Not only Cisco's internal documents, but also its external filings, show that Cisco has known for at least ten years that both customers and competitors made significant investments in reliance on Cisco's policy of encouraging use of industry-standard CLI commands. For example, in a patent application filed in 2005, later granted as U.S. patent number 7,953,886, Cisco inventors echoed Cisco's prior statements about CLI commands being commonly adopted. The Cisco inventors described IOS CLI commands in the section of the

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1   patent entitled "Related Art" and stated that those commands had been developed over "twenty

2   years" and referred to "consistency" and "backwards compatibility" in those commands.

3   Nowhere in the written disclosure of the patent, which was first published in January 2007, did

4   the Cisco inventors suggest that Cisco had any proprietary rights in *any* IOS CLI command.

5   Rather, Cisco acknowledged that "many consumers have invested heavily in IOS CLI support,

6   developing complicated scripts to handle various configuration and access needs." In the same

7   application, Cisco recognized that "many companies now strive to support some variation on

8   IOS CLI." All of those statements together would leave the reader with the impression that IOS

9   CLI commands were in the public domain – or, at a minimum, that Cisco did not claim any

10   proprietary rights in them.

11   86.   Similarly, Cisco sold networking products that were designed to interoperate

12   with other vendors' switches, and that used those other vendors' CLI command sets, even when

13   those command sets differed from the "industry standard" commands used by Cisco. For

14   example, Cisco sold implementations of its CiscoWorks Network Compliance Manager

15   products and its Cisco Tail-f products that communicated with competitors' Ethernet switches

16   by using those competitors' CLI command sets. On information and belief, Cisco did not

17   obtain, or even seek, licenses from those competitors before incorporating their CLI commands

18   into Cisco's products. Instead, it openly adopted and used other vendors' CLI commands in its

19   own networking products – conduct that further confirmed to industry participants and

20   observers that Cisco considered CLI commands to be in the public domain and usable without a

21   license.

22   87.   Cisco also marketed and sold products by representing to customers that they

23   could – and should – use the CLI commands used by Cisco to operate other vendors' switches.

24   For example, the Cisco Tail-f Network Control System ("NCS") is a tool that system

25   administrators use to configure networks. According to Cisco, one of its "key functions" is

26   "[m]ulti-vendor device configuration modification in the native language of the network

27   devices." In other words, Cisco advertised that the NCS can configure multiple different

28   vendors' switches by communicating with each switch in its "native language." Cisco

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1   explained in the NCS's publicly available product literature that one of the NCS's drivers

2   communicates with "any device with a CLI that resembles Cisco's," and that this driver "is used

3   for most CLI based devices like Alcatel-Lucent, Ericsson, Force10, etc." Thus, Cisco marketed

4   and sold networking products for the express purpose of using "a CLI that resembles Cisco's" to

5   communicate with non-Cisco switches. Again, the industry and customers would – and on

6   information and belief, did – understand from Cisco's conduct that (1) Cisco knew that "most

7   CLI based devices" used "a CLI that resembles Cisco's," and (2) Cisco agreed and intended that

8   customers could use the CLI commands used by Cisco to operate other vendors' devices.

9   88.   As Cisco was promoting the "industry standard" nature of its CLI, it was itself

10   incorporating terms from standard-setting bodies IETF and IEEE into CLI commands for new

11   features and protocols for switching. Hundreds of commands in Cisco's CLI command set

12   derive in whole or in part from an IETF Internet Standard or IEEE standard. For example, the

13   following terms, which Cisco uses to define "hierarchies" of its CLI commands in which it

14   claims copyright, are just some of the "industry standard" CLI command words that come from

15   published IETF standards: IP, IGMP, IPV6, OSPF, BGP, and VRRP. Even many of Cisco's

16   multiword commands also come directly from these standards. Just some examples of these

17   include: "vrrp authentication", "spanning-tree port-priority", "ptp domain", and "bgp

18   confederation identifier." Cisco's use of terms such as these and others from standards

19   publications confirmed the industry's understanding that when customers, other switch vendors,

20   and network engineers invested in the training and use of the Cisco-promoted "industry

21   standard" CLI, they would not later be threatened by Cisco with a claim that that the industry-

22   standard CLI is in fact uniquely Cisco's.

23   89.   On information and belief, customers and industry players relied upon Cisco's

24   long-standing policy and consistent conduct, without warning from Cisco that the very

25   investments they made in reliance on the policy could later be used against them to lock

26   customers into Cisco's inferior technology should Cisco reverse the policy in the face of a

27   competitive threat.

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1   90.   In sum, Cisco embraced, promulgated, and leveraged the standardization of CLI

2   commands for more than a decade. Cisco's internal documents, as well as its external filings,

3   confirm that it knew that customers and competitors relied on its conduct, in the form of tens of

4   millions of dollars of training, hardware, and software investments, because they had no reason

5   to expect that it would change. Unfortunately it did. Cisco has now decided to

6   opportunistically exploit these customer and competitor investments in order to maintain its

7   market dominance in the face of a real competitive threat from Arista.

8   **3.   Cisco's Reversal of Its Long-Standing Policy**

9   91.   Upon information and belief, Cisco reversed its long-standing policy in 2014 by

10   notifying customers and competitors industry-wide that use of "its" CLI was reserved

11   exclusively for use with Cisco's products. One of the ways Cisco carried out its policy reversal

12   was to announce to the industry that it claimed copyright infringement from Arista's use of 514

13   CLI commands. In direct contradiction of its long-standing policy and prior representations,

14   Cisco's General Counsel claimed in an online blog that "[t]he patented and copyrighted features

15   and implementations [of CLI] being used by Arista are *not* industry standards." Cisco

16   implemented this policy reversal without even an offer of a license on reasonable terms to its

17   claimed copyrighted CLI commands; and in contrast to its years of representations, Cisco even

18   sought injunctive relief against the use of those commands. Thus, any customer who uses CLI

19   commands that Cisco previously promoted as "industry standard" is now at risk of facing the

20   need either to rewrite its scripts and retrain its engineers, or to replace all of its non-Cisco

21   Ethernet switches.

22   92.   Cisco's policy reversal has been carried out in the marketplace. For example,

23   upon information and belief, Cisco has been telling customers that they should not invest in any

24   of Arista's Ethernet switches because such products would soon be pulled off the market. Upon

25   information and belief, these threats were made pursuant to Cisco's policy change.

26   93.   Cisco's reversal of policy and its execution of this reversal of policy in the

27   marketplace harm competition and consumers. As a result, scenarios like the following are

28   likely: A Cisco Ethernet switch customer decides that a competitor's product offers the best

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1 performance and value. The competitive Ethernet switch also offers a new innovative feature

2 that the non-Cisco competitor spent millions to develop. As part of configuring the new feature,

3 an engineer at the customer must type the industry-standard command "interface ethernet."

4 This command is also used within extensive scripts that the customer previously developed for

5 use, and the customer had trained its engineers in the use of industry-standard commands. The

6 effect of Cisco's policy reversal is that if the customer wants to adopt the competitor's

7 technology, the competitor would need to change the command "interface ethernet" and all

8 other required industry-standard commands to different words. The customer potentially would

9 have to rewrite the extensive scripts it already has completed, wherever they appear, potentially

10 in dozens to thousands of different scripts used by hundreds of engineers, and retrain all of its

11 engineers to use the new non-standard commands. In addition to the significant upfront costs,

12 customers forced to use the non-standard commands would likely face increased maintenance

13 costs as engineers accustomed to industry-standard commands would be more prone to

14 introduce errors into the network, which could result in millions of dollars in additional costs for

15 the customer.

16   94.   Thus, with major customers unable to efficiently integrate competitive products

17 because of Cisco's conduct, Cisco's dominance will not be challenged. Cisco will retain or

18 even expand upon its status as the dominant and default switch vendor, preventing competitors

19 from competing effectively despite any technological and efficiency advantages they offer vis-à-

20 vis Cisco.

21   95.   Upon information and belief, Cisco has engaged in other conduct pursuant to its

22 policy reversal that is specifically designed to foreclose competitive entry and expansion that

23 would benefit customers. This necessarily drives up costs for Cisco's competitors, both in terms

24 of their transaction costs and their ability to sell Ethernet switches on the merits as opposed to

25 how they adapt to Cisco's change in policy.

26   96.   Cisco knew for years that its competitors' Ethernet switches were being

27 managed with the same industry-standard commands it used, which it now claims are

28 proprietary, and did nothing. It explicitly acknowledged customers' investment and reliance

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1   upon the industry-standard CLI in company documents. As part of the regular course of

2   business, Cisco – and other vendors – have acquired competitors' products for benchmark

3   testing, necessitating knowledge and use of each competitor's CLI. As discussed, Cisco

4   encouraged the very reliance on industry-standard CLI that it observed for itself in the

5   marketplace prior to its change in policy.

6   **B.   Cisco's SMARTnet Penalty for Competitive Ethernet Switch Purchases**

7   97.   Upon information and belief, Cisco earns the majority of its revenue in the

8   Relevant Service Markets through its SMARTnet service program. SMARTnet service includes

9   access to a technical assistance center, online knowledge base, proactive diagnostics and alerts

10   on devices, software updates, hardware replacement on various timetables, and optional onsite

11   service from Cisco engineers.

12   98.   Upon information and belief, Cisco's Ethernet switch competitors provide

13   comparable maintenance services for their own products (but not for Cisco's) sold into the

14   Relevant Product Markets. Also upon information and belief, third-party maintenance and

15   service vendors provide a minority of such services into the Relevant Service Markets, due to

16   the restrictive policies Cisco has put in place (as discussed below).

17   99.   The global Relevant Service Market includes providers with worldwide service

18   capabilities, and multinational customers that have a demand for such global capability. The

19   U.S. Relevant Service Market includes providers that maintain and service switch products

20   tailored for use in the United States specifically, and U.S.-based customers primarily compare

21   such vendors when evaluating a given service offering.

22   100.   Providers of Ethernet switch maintenance and service compete for sales to

23   global customers and national customers. Accordingly, it is appropriate to analyze the

24   competitive effects of Cisco's conduct in a global market and in the national market in which

25   maintenance vendors compete.

26   101.   Upon information and belief, Cisco consistently has provided in excess of 95%

27   of the maintenance and service on its Ethernet switch products; thus, due to Cisco's consistent

28   share in excess of 65% in the Relevant Product Markets, Cisco has possessed a consistent share

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1   of approximately 60% (95% of the 65% Relevant Product Markets share) in the Relevant

2   Service Markets. Cisco is a monopolist in the Relevant Service Markets because its share has

3   been maintained due to the restrictive polices described below, which serve as substantial

4   barriers to entry.

5   102.   No Ethernet switch maintenance and service competitor can offer the same

6   range of services that Cisco provides because, as Cisco highlights in its SMARTnet sales

7   materials, "no Third Party Maintenance Provider can provide [customers] with an apples-to-

8   apples match with what Cisco's SMARTnet provides," and "a Third Party Maintenance

9   Provider is not authorized to provide [customers] with Cisco bug fixes, patches and updates."

10 These "bug fixes, patches and updates" are essential to the efficient, effective, and full operation

11 (including all features) of Cisco's hardware – they cannot be replicated and there are no

12 reasonably interchangeable substitutes for such services.

13   103.   Owners of Cisco Ethernet switches predominantly are locked into Cisco's

14 SMARTnet contracts because another vendor will not be able to provide all necessary updates

15 and the owner of the switch would not be able to utilize the switch fully and securely. These

16 facts, among others, lead to Cisco's admission that its non-discounted SMARTnet pricing is far

17 more expensive than that of third-party providers. Upon information and belief, third-party

18 service providers have been used in only a minority of cases by customers that have limited

19 maintenance requirements. Cisco has used its largely uncontestable power in the Relevant

20 Service Markets to maintain and extend its monopoly power in the Relevant Product Markets.

21   104.   Upon information and belief, Cisco's customers in the Relevant Service Markets

22 have entered into one- to two-year renewal SMARTnet contracts for purposes of maintenance

23 and service on their purchased Cisco Ethernet switches and other network products. Upon

24 information and belief, a substantial number of Cisco maintenance and service customers have

25 SMARTnet contracts, which can cover the maintenance and service of millions of dollars'

26 worth of Ethernet switches.

27   105.   Upon information and belief, when Cisco's SMARTnet contracts have come up

28 for renewal, Cisco has negotiated the renewed SMARTnet rates in tandem with the purchase of

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1 new Ethernet switches, including high-speed Ethernet switches. Specifically, if a customer

2 wishes to choose a competitor for a new Ethernet switch purchase, the customer has incurred a

3 penalty on its SMARTnet rate.

4   106.   Thus, Cisco has used its control over SMARTnet service pricing in the Relevant

5 Service Markets as an anticompetitive weapon to raise rivals' costs to preclude competition

6 from more innovative and efficient suppliers in the Relevant Product Markets. Although it is

7 technically possible for Cisco's customers to maintain their SMARTnet service without a

8 corresponding purchase of new Ethernet switches, Cisco has used massive penalties on

9 SMARTnet rates to deter customers from doing so. Upon information and belief, the difference

10 in SMARTnet price between the price charged to a customer buying a competitor's Ethernet

11 switch and one buying only Cisco's Ethernet switches is substantial and operates as a serious

12 penalty. If the price difference were attributed to Cisco's Ethernet switch sales as a discount,

13 Cisco would be selling Ethernet switches in the Relevant Product Markets below its incremental

14 costs (even taking any service cost difference to Cisco into account).

15   107.   Maintenance and service of Cisco switches is a service that Arista does not and

16 cannot offer, in large part due to Cisco's own policies that prevent any competitive provider

17 from offering the full suite of products and services necessary to provide maintenance and

18 service to any large customer. While Arista offers maintenance and service of its own switches,

19 service of the massive installed base of Cisco switches created through Cisco's years of market

20 dominance is a separate product that (i) all major customers in the market must purchase

21 because they all have an installed base of Cisco switches, and (ii) only Cisco can offer. Thus,

22 Arista does not and cannot offer a competitive product to Cisco's SMARTnet services.

23   108.   Cisco's practice amounts to economic coercion because Cisco's competitors in

24 the Relevant Product Markets, including Arista, cannot offer a product that can replace

25 SMARTnet. Thus, Cisco can use a penalty on SMARTnet to undercut competition in the

26 Ethernet switch market. A more efficient competitor in the switch market, such as Arista, will

27 still be unable to compete because Cisco leverages its monopoly power in the Relevant Service

28 Markets – through its massive installed base – to make it economically unattractive for

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customers to purchase competitive switches. Moreover, the competitor cannot offer an alternative to SMARTnet, leaving it no competitive options, and ultimately depriving customers of a more efficient alternative in the Ethernet switch market. Upon information and belief, Cisco's practice of bundling SMARTnet renewals with new purchases of Ethernet switches has been widespread such that a significant proportion of new sales opportunities have been foreclosed from Cisco's competition.

109.   Also upon information and belief, Cisco has included other products or services in bundles with Ethernet switches, such as routers or servers, which are not offered by more efficient and innovative Ethernet switch competitors. This practice also has had the effect of foreclosing highly innovative competitors in the Relevant Product Markets that do not offer all the products that Cisco has included in its bundles. In short, Cisco is leveraging its dominant position in other market segments to ensure that its core monopolies in the Relevant Product Markets are protected against innovative and efficient new competition.

110.   Cisco's anticompetitive scheme is not limited to SMARTnet and the aforementioned policy reversal regarding industry standard CLI commands. The above anticompetitive strategies are examples of the type of conduct that is part of Cisco's overall scheme. Upon information and belief, there are other facets of Cisco's overall strategy, such as interfering with Arista's relationships with its vendors and suppliers, including at least one with which Arista had done business for several years. Upon information and belief, Arista's vendors and suppliers have been led by Cisco to believe that if they did business with Arista in the United States, Cisco would not do business with them. The threat is coercive because most vendors need to be able to do business with Cisco.

IX.   **CISCO'S OVERALL SCHEME HARMS CONSUMERS AND STIFLES MORE INNOVATIVE AND EFFICIENT TECHNOLOGY**

111.   Cisco's multifaceted scheme forecloses the first real chance for competition in the Relevant Product Markets. ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ Again, while the following discussion identifies some of the harmful effects of Cisco's conduct in the Relevant Product Markets, the Court should consider the effects of this broad-ranging scheme as a whole.

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112.   Cisco's course of conduct targets consumers in the Relevant Product Markets. Absent this Court's intervention, Cisco will continue to maintain supra-competitive prices for less-innovative technology in the Relevant Product Markets. Because customers are now unable to consider offerings on the merits, for instance if competitors provide more reliable or faster Ethernet switches (as Cisco acknowledges in its documents), such customers in the Relevant Product Markets are likely to pay supra-competitive prices for less-innovative technology. Indeed, Cisco itself would likely be forced to lower its prices to the benefit of consumers if more innovative competition was not foreclosed. Instead, upon information and belief, Cisco is able to suppress its output and maintain supra-competitive prices.

113.   Customers can no longer compare products on the basis of their technological innovations or efficiency. While the maintenance of pricing and the suppression of more innovative products are classic antitrust harms, Cisco is also robbing customers of a choice on the merits. For instance, Cisco has forced customers to assess whether competitors' products are now long-term viable investments given its policy reversal. Customers cannot viably answer this question because they cannot predict how Cisco will implement its new policy next. Indeed, customers may decide that due to the long-term investments they made in reliance on Cisco's many representations that commands were industry-standard and thus interoperable with other vendors' switches, it does not matter how much more innovative or efficient another technology may be given the investments they would have to remake to support competing technology products that are intended to be operational over a five- to fifteen-year life cycle.

114.   Indeed, the capital investment made by customers in Ethernet switches runs into the billions (the global Ethernet switch market is currently more than $23 billion annually and growing); thus, customers treasure the ability to choose the product that offers the best performance and best value. Cisco's conduct hinders them from doing so. Indeed, upon information and belief, customers' prior "huge investment" (as Cisco itself described it) in Cisco's Ethernet switches is now preventing customers in the Relevant Product Markets from making choices on the merits due to Cisco's policy change.

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115.   Cisco's conduct freezes the Relevant Product Markets and disincentivizes customers from buying competitive Ethernet switches even when they are the most cost effective and/or innovative technology in the Relevant Product Markets.

116.   In addition, Cisco's conduct drives up its competitors' costs in the Relevant Product Markets by forcing competitors to justify to customers that it is permissible for their products to utilize CLI commands that Cisco characterized as industry-standard commands. In addition, upon information and belief, if a large customer's scripts had to be modified to accommodate non-industry-standard commands, it would increase the cost of implementing a non-Cisco vendor's product by millions of dollars.

117.   Cisco's conduct has had debilitating effects upon innovative competing suppliers in the Relevant Product Markets. Without being able to penetrate customers that have spent millions training their employees and building scripts based on industry-standard commands, competitors' ability to achieve the viable scale needed to compete will be difficult, if not impossible. Under these circumstances, some competitors may decide that there is no business case for long-term investment in their products, and be forced to exit the market, reducing further the very modest competitive pressure in the market. Even competing suppliers that manage to remain in the industry will have smaller budgets to invest in R&D, which will result in a chilling effect on innovation. As a result, customers will be limited in their ability to choose the most innovative suppliers in the Relevant Product Markets, and will be forced to continue paying supra-competitive prices for Cisco's products.

118.   Indeed, Cisco itself has been at the forefront of advocacy in favor of patent-law reform to combat the anticompetitive effects associated with a monopolist's "ambush" of customers and competitors based on their adoption of an industry standard. Cisco's chief in-house antitrust counsel and General Counsel have repeatedly announced that, where customers and competitors adopt a standard on the premise that no proprietary rights were associated with that adoption, any *ex post* assertion of such alleged proprietary rights "has a much higher value *ex post* than *ex ante*." These comments highlight Cisco's recognition that the very kind of conduct in which it is engaged here is harmful to competition and consumers. In addition, these

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1   types of statements, made before its policy reversal, further encouraged the industry to believe

2   that Cisco would not assert alleged intellectual property in an industry-standard utility.

3   119.   As discussed, the Relevant Product Markets encompass technology that is

4   pivotal to the Internet and e-commerce as a whole, both now and even more so in the future.

5   Leading technology companies depend upon continued rapid advances in high-speed switch

6   technology to support their own ability to innovate. Thus, the anticompetitive effects of Cisco's

7   conduct will inevitably spill over into other markets depending on that innovation. Global and

8   U.S. consumers of all such technology will ultimately pay the price of Cisco's exclusionary

9   conduct if Cisco is not enjoined.

10   120.   As another example, Cisco's practice of discriminatory SMARTnet pricing

11   against customers that choose to buy new Ethernet switches from a competitor is specifically

12   targeted at customers who seek to purchase more innovative and cost-effective technology, but

13   are victims of Cisco's SMARTnet contracts and policies for their previous Ethernet switch

14   purchases. Customers in the Relevant Product Markets will continue to pay supra-competitive

15   prices for less innovative products due to this practice.

16   121.

17

18   *See* Ex. F. As a result of Cisco's

19   price penalties involving at least SMARTnet (and, upon information and belief, potentially other

20   Cisco product lines), Cisco effectively raises those barriers to entry and the costs of rivals,

21   which has the effect of raising the relative price of Ethernet switches sold to customers in the

22   Relevant Product Markets. For example, even though Arista is a more innovative and efficient

23   supplier in the Relevant Product Markets, upon information and belief, customers forgo the

24   purchase of Arista's products because Cisco would significantly penalize them through

25   SMARTnet pricing. Upon information and belief, major customers may test a competitive

26   vendor with an initial sale of Ethernet switches that leads to more extensive investments in that

27   competitor's products. Cisco's bundling penalties have precluded even such initial purchases of

28   competitive equipment. By raising rivals' costs in this manner, Cisco has maintained and

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1   increased its monopoly power over price, quality, and innovation in the Relevant Product

2   Markets.

3   **X.   CISCO HAS NO BUSINESS JUSTIFICATION FOR ITS CONDUCT, AS ITS
        SOLE PURPOSE IS TO FORECLOSE COMPETITION**

4

5   122.   Cisco has no valid business justification for its conduct – its sole purpose is the

     suppression of competition, and its exclusionary conduct offers the market no procompetitive
6
     benefit. The only thing that changed before Cisco's reversal of its policy was the emergence of
7
     more innovative and more efficient competitors that provided the first real threat to its
8
     monopolies. Faced with this threat, Cisco's then-CEO and current Chairman John Chambers
9
     directed, ██ *See*
10
     Ex. A. ██
11

     ██████████████████████████████████████
12
         123.   Upon information and belief, in the absence of Cisco's long-standing policy and
13
     its recent reversal, competitors and customers would not have been locked into industry-
14
     standard CLI. Rather, customers would have demanded and used CLI commands that did not
15
     potentially lock them into any particular vendor, and competitors would not have adopted CLI
16
     commands that could be used to foreclose them from the Relevant Product Markets. Again
17
     upon information and belief, the competitive dynamics of the Relevant Product Markets in
18
     terms of both manufacturer investments and customer reliance, including, *e.g.*, the development
19
     of scripts and the training of engineers, would have been different in the absence of Cisco's
20
     conduct.
21
         124.   Cisco's conduct before the IETF highlights the pretextual nature of its policy
22
     change. There, Cisco continues to make submissions contributing to Internet standards that
23
     contain its purported proprietary property in industry-standard commands. For example, in
24
     January 2015, Cisco submitted a proposal for consideration into an IETF standard, known as an
25
     internet draft, utilizing its allegedly proprietary command "default-metric." Despite the IETF's
26
     Intellectual Property Right ("IPR") policy requiring Cisco to disclose any purported intellectual
27
     property, including copyright and patents, Cisco has disclosed nothing of the sort for its
28
     submissions containing industry-standard commands.

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XI.   ARISTA HAS SUSTAINED AN ANTITRUST INJURY AS A DIRECT AND PROXIMATE RESULT OF CISCO'S COURSE OF CONDUCT

125.   Since its founding as a company in 2004, Arista has persuaded some of the most cutting-edge technology companies in the world to adopt its products. Many of these sales were into customer environments where Cisco is the predominant vendor in the customer's network infrastructure. Arista has pioneered a revolutionary approach to scalable, high-speed Ethernet switches that is driving new network architectures for its customers. Arista has made these advancements with a multitude of technological breakthroughs, including its EOS operating system. As one senior Cisco employee acknowledged, "Arista is truly an amazing company," and its founder is "a genius" whom "Cisco should fear whenever he treads nearby." *See* Ex. B.

126.   Arista's success represents exactly the kind of phenomenon which would result in increased output, innovation, greater efficiency, and choice to consumers in the absence of Cisco's multifaceted scheme. The injury to Arista is a direct byproduct of the injury to consumers discussed above.

127.   While Cisco's scheme has been designed to foreclose all innovative competition, Cisco has had a particular animus against Arista. As noted earlier, Cisco even funded and immediately acquired a start-up called Insieme that was supposed to be the "Arista killer." Insieme, however, has not succeeded in slowing Arista's momentum in the marketplace through legitimate competition. Cisco's broad-ranging scheme of anticompetitive conduct is specifically designed to preclude competitors such as Arista from making further gains in the Relevant Product Markets. Those gains would inevitably result in lower prices, increased innovation, and increased overall choice to customers.

128.   Like all Cisco competitors, Arista is unable to offer full-scale maintenance and service of Cisco equipment (including Ethernet switches) due to Cisco's own policies. Even though Arista is a more innovative and efficient supplier in the Relevant Product Markets than Cisco, Cisco has been able to maintain its monopolies in the Relevant Product Markets and maintain supra-competitive prices by penalizing customers for SMARTnet service pricing should they implement Arista Ethernet switches in their existing networks. Upon information and belief, Arista has lost sales in the Relevant Product Markets due to this practice.

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129.   Due to its success in the high-speed Ethernet switch markets – Arista has grown to a nearly 8% share in just six years – Arista would present an even greater competitive threat to Cisco's monopolies in the Relevant Product Markets if it were permitted to compete on the merits. ██ ████████████████████████████ Indeed, the harm to Arista is a perfect proxy for the harm to industry-wide competitors and customers, because it is the type of innovative and efficient competitor that, if not improperly hindered by Cisco's overall scheme, would be able to significantly penetrate the Relevant Product Markets. That penetration, absent Cisco's conduct, would force Cisco to become more innovative and more efficient to the benefit of consumers. Instead, the opposite is occurring. Competitors such as Arista are being improperly foreclosed, and Cisco is maintaining its dominance not by virtue of its products, but rather through its overall anticompetitive scheme.

130.   Arista's injury reflects the anticompetitive effects of Cisco's exclusionary conduct. It is precisely through the exclusion of Arista and other rivals from effective competition in the Relevant Product Markets that Cisco has been able to maintain its monopoly power, resulting in higher prices, reduced output, and slowed innovation.

XII.   NO IMMUNITY

131.   The alleged validity of Cisco's copyright claim is irrelevant here because Cisco's anticompetitive conduct does not lie in its enforcement of intellectual property rights, but rather in its long-running scheme and dramatic change in policy. Cisco cannot claim any immunity for its overall anticompetitive scheme, which extends back more than a decade. For that time, upon information and belief, Cisco has embarked on a course of conduct that was executed in the marketplace with, *e.g.*, sales sheets and negotiations, marketing presentations, IETF submissions (both working group emails and internet drafts of standards), customer sales calls, engineer support calls, recruiting materials, unilateral maintenance and service policies, and even intimidation tactics. All of this conduct, taken as a whole, played a part in Cisco's overall scheme to monopolize the Relevant Product Markets. As Cisco knew, its conduct created a reliance interest on the part of customers and competitors in the market, which became

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1   locked into the use of industry-standard CLI. As a result, this Court need not resolve the

2   validity of Cisco's purported intellectual property claims before addressing the acute

3   anticompetitive harm resulting from Cisco's conduct.

4   132.   Thus, the *Noerr-Pennington* doctrine does not apply to this case. Cisco's

5   conduct is not merely encompassed by a lawsuit or other government petitioning, nor is the

6   lawsuit particularly relevant. Rather, Cisco's scheme has had a particular focus on *marketplace*

7   conduct and impact, including but not limited to its penalizing of SMARTnet customers who

8   purchase competitive Ethernet switches, as well as decades of conduct promoting industry

9   reliance on industry-standard commands. Cisco has even used a standard-setting body, the

10   IETF, as a forum to further execute its scheme by encouraging and successfully securing formal

11   standards adopted that incorporate industry-standard commands. Even with regard to Cisco's

12   lawsuit, Cisco has brought that legal battle into the marketplace by engaging in intimidation

13   tactics. Upon information and belief, Cisco specifically targeted several customers in an effort

14   to disrupt Arista's business relations. Cisco's anticompetitive conduct could not be further from

15   a mere lawsuit; rather it is an overall scheme focused on the marketplace that is specifically

16   designed to foreclose competitive entry and expansion.

17   **XIII.   CLAIMS FOR RELIEF**

18   *Count I*

19   *Violation of Sherman Act § 2: Unlawful Monopolization*

20   133.   Arista realleges and incorporates paragraphs 1 through 132 by reference.

21   134.   Cisco's conduct constitutes the intentional and unlawful maintenance of

22   monopoly power in each of the Relevant Product Markets, in violation of Section 2 of the

23   Sherman Act, 15 U.S.C. § 2.

24   135.   For the purpose of maintaining its monopoly power, Cisco committed numerous

25   acts, including:

26   (a)   Carrying out a long-time policy for over a decade that encouraged

27   customers and competitors to utilize and innovate on top of industry-standard commands, only

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1 to reverse that policy when Cisco faced the first threat to its dominance when competitors

2 started introducing Ethernet switches superior in quality to Cisco's;

3   (b)   Engaging in associated intimidation tactics pursuant to its policy change

4 and overall scheme to hinder competition; and

5   (c)   Penalizing SMARTnet customers renewing their contracts who choose to

6 implement new competitive Ethernet switches into their networks that still require maintenance

7 and service of their existing Cisco Ethernet switches and other network products, thus using its

8 monopoly power in the Relevant Service Markets to maintain its monopoly power in each of the

9 Relevant Product Markets.

10   136.   Cisco has excluded competitors, including Arista, from each of the Relevant

11 Product Markets and has deprived consumers of the benefits of competition among suppliers of

12 switches.

13   137.   Cisco does not have a legitimate business purpose for any of its anticompetitive

14 conduct. Any claimed procompetitive benefit is pretextual in light of the obvious competitive

15 circumstances and associated marketplace conduct inconsistent with any such benefit. Cisco's

16 conduct does not result in any greater ability to reduce costs in producing or innovating upon

17 Ethernet switches it sells to customers that could result in reduced prices, higher quality, or

18 greater availability to customers. Neither does Cisco's conduct reduce barriers to other vendors'

19 entry, or otherwise result in greater competition in the Relevant Product Markets. The only

20 "benefit" that flows from Cisco's conduct is a reduction in competition, and that benefit inures

21 only to Cisco's advantage, not to that of customers or competition on the merits.

22   138.   Cisco's unlawful monopolization has injured competition in each of the

23 Relevant Product Markets, suppressed sales of Arista's products and the products of other

24 competitors, diminished Arista's future sales opportunities and the sales opportunities of other

25 competitors, and increased Arista's operating costs and the operating costs of other competitors.

26   139.   Cisco's overall course of conduct has and will continue to, *inter alia*, maintain

27 supra-competitive prices to customers in each of the Relevant Product Markets, harm innovation

28

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1   associated with the products offered in each of the Relevant Product Markets, and otherwise rob

2   customers of their ability to make an unfettered choice of technology on the merits.

Count II

Violation of Sherman Act § 2: Attempted Monopolization

5   140.   Arista realleges and incorporates paragraphs 1 through 132 by reference.

6   141.   Cisco acted with a specific intent to monopolize and to destroy competition in

7   each of the Relevant Product Markets. Cisco devised and implemented a plan to systematically

8   eliminate competition in each of the Relevant Product Markets.

9   142.   Cisco willfully engaged in a course of exclusionary conduct to obtain a

10   monopoly in each of the Relevant Product Markets, including:

11   (a)   Carrying out a long-time policy for over a decade that encouraged

12   customers and competitors to utilize and innovate on top of industry-standard commands, only

13   to reverse that policy when Cisco faced the first threat to its dominance when competitors

14   started introducing Ethernet switches superior in quality to Cisco's;

15   (b)   Engaging in associated intimidation tactics pursuant to its policy change

16   and overall scheme to hinder competition; and

17   (c)   Penalizing SMARTnet customers renewing their contracts who choose to

18   implement new competitive Ethernet switches into their networks that still require maintenance

19   and service of their existing Cisco Ethernet switches and other network products, thus using its

20   monopoly power in the Relevant Service Markets to enhance its power in each of the Relevant

21   Product Markets.

22   143.   Cisco does not have a legitimate business purpose for any of its anticompetitive

23   conduct. Any claimed procompetitive benefit is pretextual in light of the obvious competitive

24   circumstances and associated marketplace conduct inconsistent with any such benefit. Cisco's

25   conduct does not result in any greater ability to reduce costs in producing or innovating upon

26   Ethernet switches it sells to customers that could result in reduced prices, higher quality, or

27   greater availability to customers. Neither does Cisco's conduct reduce barriers to other vendors'

28   entry, or otherwise result in greater competition in the Relevant Product Markets. The only

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1   "benefit" that flows from Cisco's conduct is a reduction in competition, and that benefit inures

2   only to Cisco's advantage, not to that of customers or competition on the merits.

3   144.   Throughout the time Cisco engaged in this exclusionary conduct, it had a

4   dangerous probability of succeeding in gaining a monopoly in and controlling each of the

5   Relevant Product Markets and excluding its competitors.

6   145.   Cisco's unlawful attempts to destroy competition in each of the Relevant

7   Product Markets have injured competition in each of the Relevant Product Markets, suppressed

8   sales of Arista's products and the products of other competitors and diminished Arista's future

9   sales opportunities and the sales opportunities of other competitors, and increased Arista's

10   operating costs and the operating costs of other competitors.

11   146.   Cisco's overall course of conduct has and will continue to, *inter alia*, maintain

12   supra-competitive prices to customers in each of the Relevant Product Markets, harm innovation

13   associated with the products offered in each of the Relevant Product Markets, and otherwise rob

14   customers of their ability to make an unfettered choice of technology on the merits.

15   *Count III*

16   *Violation of Section 17200 of the California Business and Professional Code*

17   147.   Arista realleges and incorporates paragraphs 1 through 132 by reference.

18   148.   Cisco has committed acts of unfair competition within the meaning of Section

19   17200 of the California Business and Professional Code, the California Unfair Competition Law

20   ("UCL"), by engaging in unlawful and unfair conduct. Cisco's unlawful and unfair business

21   acts and practices have harmed competition in California and elsewhere threaten significant

22   harm to competition in the future. Cisco's conduct is a direct and proximate cause of injury to

23   California consumers and to Arista.

24   149.   Cisco has engaged in unlawful conduct pursuant to business activity in violation

25   of the UCL. As set forth in paragraphs 133 through 146 above, Cisco's conduct violates

26   Section 2 of the Sherman Act.

27   150.   Cisco has engaged in unfair conduct within the meaning of the UCL by, *inter*

28   *alia*: (1) opportunistically reversing a long-standing policy of encouraging reliance on the use of

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1 industry-standard CLI commands only when its dominant position in the Relevant Product

2 Markets began to be threatened by competitors offering higher-quality and/or lower-cost

3 products; (2) engaging in intimidation tactics pursuant to its shift in policy in order to induce

4 several customers not to purchase products from Arista; (3) coercing its own customers into

5 forgoing purchasing competitive switch products by threatening punitive price increases for its

6 SMARTnet service; and (4) interfering with Arista's relationships with vendors and suppliers.

7   151.   Cisco's unfair conduct has significantly harmed competition in the markets for

8 Ethernet switches and high-speed Ethernet switches within California and elsewhere and

9 threatens an incipient and continuing harm to competition if not restrained. Cisco's unfair

10 conduct also violates the policy and spirit underlying the antitrust laws. For more than a decade,

11 Cisco knowingly encouraged the switch industry to use industry-standard CLI commands

12 leading customers to make investments in reliance on widespread use of those commands.

13 Cisco's conduct solidified its dominant position by ensuring that the vast majority of network

14 engineers would be trained on industry-standard CLI. However, Cisco reversed course when its

15 dominance was threatened by competitive suppliers making the hundreds of millions of dollars

16 in investments necessary to develop higher-quality and/or lower-cost Ethernet switches.

17 Customers made significant investments dependent on industry-standard CLI and, by reversing

18 its long-standing policy, Cisco is able to opportunistically exploit those investments to lock

19 customers into Cisco's products.

20   152.   Arista has suffered injury as a direct, proximate, and foreseeable result of

21 Cisco's unlawful and unfair business activities. Arista has suffered or faces the threat of, *inter*

22 *alia*, increased costs related to unwinding its own investments in developing products in reliance

23 on Cisco's long-standing policies, loss of customers and potential customers resulting from

24 customer investments locking them into CLI commands that Cisco had held out as an industry

25 standard, loss of profits, loss of goodwill and product image, and uncertainty in Arista's own

26 business planning and among customers regarding Cisco's future policy changes.

27   153.   California consumers have been harmed and are threatened with continued harm

28 as a direct, proximate, and foreseeable result of Cisco's unlawful and unfair activity. If Cisco's

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conduct is not restrained, Ethernet switch customers will either be locked into more expensive and/or lower-quality Cisco products or incur substantial costs to undo the investments they had made based on industry-standard CLI. These customers will likely pass these costs downstream or suffer from reduced output and/or decreased innovation in their own business operations. Many of these customers create products and services that are fundamental to the operation of the Internet and to emerging technologies, such as cloud computing. Cisco's conduct thus threatens to increase prices and decrease innovation in this critical sector of the California economy.

154.   Arista is seeking a preliminary and permanent injunction to prevent Cisco from interfering with Arista's prospective economic relations and from damaging competition in the Relevant Product Markets through to its anticompetitive conduct.

PRAYER FOR RELIEF

WHEREFORE, Arista prays for judgment in its favor and against Cisco as follows:

1.   Finding that Cisco engaged in unlawful anticompetitive conduct in violation of Section 2 of the Sherman Act (15 U.S.C. § 2), and Section 17200 of the California Business and Professional Code;

(a)   An Order directing the termination of the anticompetitive conduct and injunctive relief that restores competition to the markets at issue, including but not limited to restoring Arista to the position it would have occupied but for Cisco's unlawful exclusionary conduct;

(b)   Treble damages (including lost profits), in an amount to be determined at trial and that cannot now be adequately quantified before relevant discovery;

(c)   Arista's costs of suit herein, including its attorneys' fees actually incurred;

(d)   Punitive damages;

(e)   Restitutionary relief; and

(f)   Such other relief as may be just and proper.

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REQUEST FOR TRIAL BY JURY

2   Pursuant to Federal Rule of Civil Procedure 38(b), Arista respectfully requests trial by

3   jury for all of the issues pled so triable.

4

Dated: February 24, 2016   Respectfully submitted,

5

6   KEKER & VAN NEST LLP

7   WILSON SONSINI GOODRICH & ROSATI

8

9   By: */s/ Robert A. Van Nest*

10   ROBERT A. VAN NEST

11

12   Attorneys for Plaintiff
                                           ARISTA NETWORKS, INC.

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EXHIBIT A

**REDACTED VERSION OF
DOCUMENT SOUGHT TO BE SEALED
IN ITS ENTIRETY**

EXHIBIT B

**REDACTED VERSION OF
DOCUMENT SOUGHT TO BE SEALED**

From: Phillip Remaker (remaker)
To: Manas Moothedath
Sent: 11/18/2014 5:24:59 PM
Subject: Re: Its Goodbye...

Arista is truly an amazing company, with some amazing people. I have a lot of very good ex Cisco friends there if you want me to put in a good word with anybody for you.

I actually met Andy B for the first time last week. He is a gentle giant and a genius. Cisco should fear whenever he treads nearby. I joked with him about it but he said that he has nothing but the utmost respect for Cisco. He's a classy guy.

I hope you will periodically check in and let me know how you're doing, and then weasel some trips to the US from them. You know, for training.

On Nov 18, 2014, at 4:04 AM, "Manas Moothedath"   wrote:

Hi Phil,

I am actually moving to Arista in Bangalore. To begin with, I shall be with the TAC again there - the main difference would be the fact that is a very small team there (5 people right now) and there are not technology divisions and just support in general.

As much as I love support, in the future - say 2/3 years ahead, I shall venture into other adjacent functions...

I fear that as the team has grown here in Bangalore, the team has grown beyond a point where I am able to contribute constructively on a day-to-day basis.

Hopefully this change would allow me to get into that phase of exciting new technologies and new experiences.

Thanks again for everything.

Cheers,
Manas

On Tue, Nov 18, 2014 at 2:29 AM, Phillip Remaker (remaker)   wrote:
Dear Manas,

Thank you for such kind words! Tell me more about your new adventure! I hope it is something that taps your inner passions and makes you happy to wake up every day. Life is too short to work in a shitty job.

Good luck. And if you end up in Silicon Valley, I have a few greasy burger places for you to try.   is the best way to connect to me.

Congratulations. I wish you the best of luck.

On Nov 16, 2014, at 10:27 PM, "Manas R Moothedath (mrmoothe)"   wrote:

Dear Phil,

Of the handful of people that I'm sending out personal notes to before I leave this week, you seem to the hardest.

You have been an image that personifies what Cisco is all about for me.

Over the last 6 years, from the first time you were here discussing 'why PureDigital networks' to the multitude of discussions that we have had online and offline about technology, Raspberry Pi, Cisco and everything else holy and geekly :) I have collected some very special conversations for the future.

Each conversation has left me more excited and driven and with a certain clarity on what I want to be doing next…

This 21st (november) will be my last working day at Cisco as I'm moving on to do something new with life. There are so many thoughts and images that come to my head while I stumble for words that would do justice to what I would like to say to you but I'm coming up empty. So I'm going to simply going to say - "Thanks for being *you*"

I want to you know though, that you – for me personally is what the company *Cisco* all about and I'll always cherish these thoughts and memories.

Thanks for being a profound part of my career and life. I'll keep in touch with you and find some reason to come meet you and share a greasy burger sometime :)
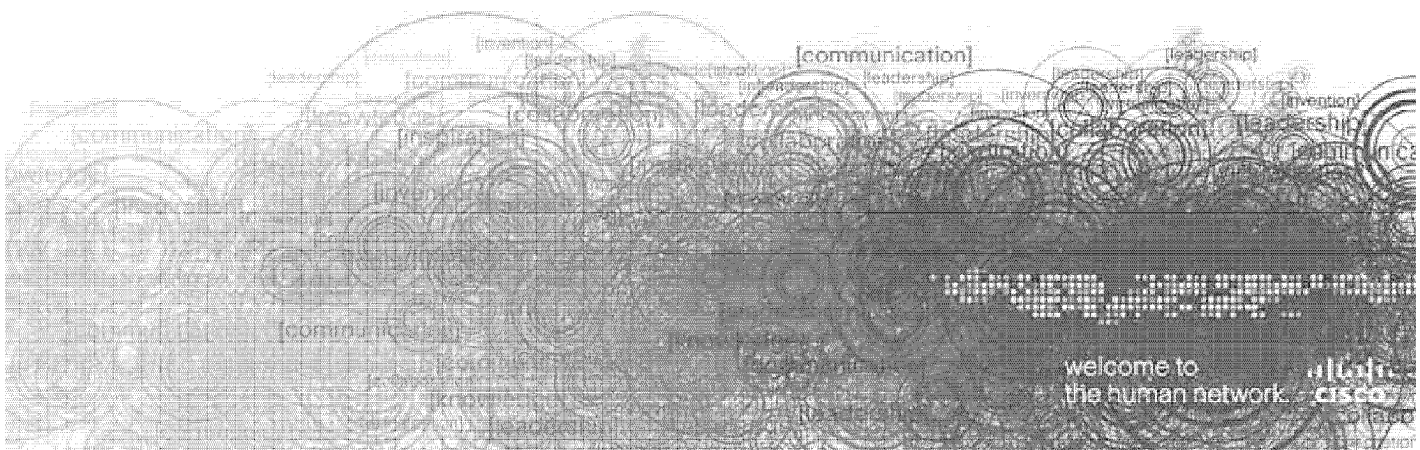

Regards,
Manas

EXHIBIT C

**REDACTED VERSION OF
DOCUMENT SOUGHT TO BE SEALED
IN ITS ENTIRETY**

EXHIBIT D

Cisco *live!*

**Developer
Services Program**

Thinking Inside the Box—
Onboard Automation with EEM

BRKDEV-1191

welcome to
the human network.

cisco

What Is Coming in EEM 3.2

- Three new event detectors
  - Neighbor discovery event detector
    - Detect and generate CDP and LLDP-related events
  - Identity event detector
    - Detect and generate events related to authentication and authorization over 802.1x and MAB protocol
  - MAC address table event detector
    - Monitor MAC address table entry changes and generate corresponding events
- One new type of policy—Cisco IOS.sh-based policy
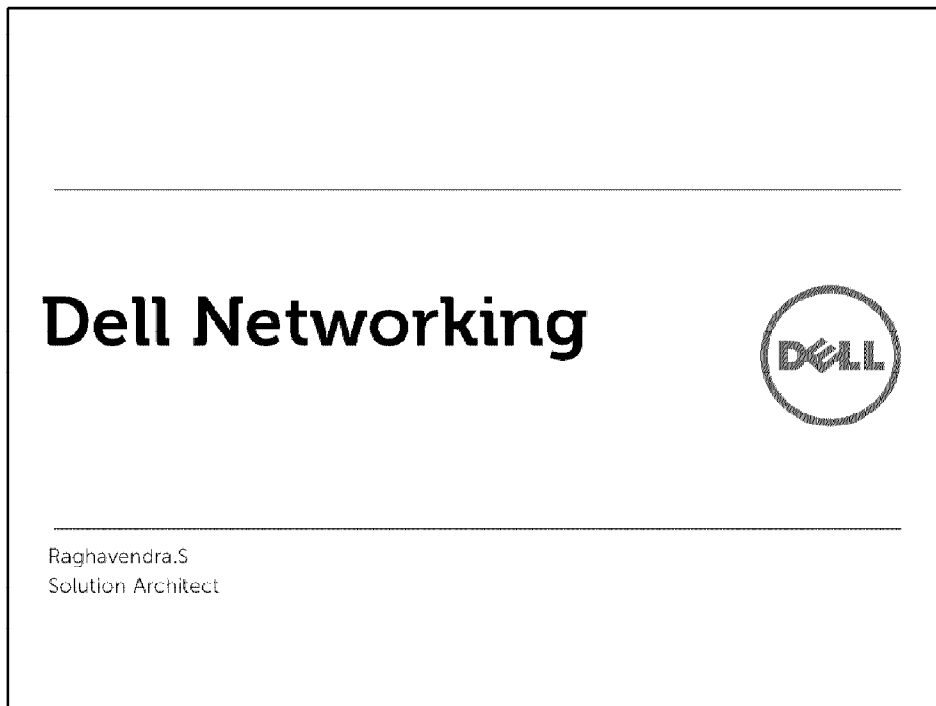 - A simple and powerful way of designing EEM policy
  - Cisco IOS.sh is a scripting language similar to Linux bash for Cisco IOS CLI

IOS.sh Shell Drivers

- CLI is complex and getting more complex

- \> 75% of all network failures can be linked to human configuration errors [*]

- Configuration CLI is different for different versions of IOS (and platforms)

- There is no good way to extend or modify the behavior of CLI without modifying IOS itself (12-18 month process)

- Customers have huge investment in Cisco CLI. We are extending and preserving that investment

[*] Gartner report, reported in CNET News, 1-26-01, SAGE Report, http://hissa.nist.gov/kuhn/pstn.html

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EXHIBIT E

Dell Networking

Raghavendra.S
Solution Architect

Executive summary:
Trends such as server virtualization and the proliferation of multi-core processors are increasing the requirement for high I/O performance with ultra-fast response times. Flash storage is the leading technology that enables IT to turbocharge I/O intensive applications and deliver the low latencies and ultra-fast response times that they need. Workloads such as OLTP, Data Warehousing and Virtual Desktop in particular can reap the benefits of flash storage, delivering impressive results in operations such as on-line queries, batch processing, retail transactions, business analytics, peak-time VDI logins, and many others. But until now, flash storage has been too expensive for most customers to deploy on a large scale, and was mostly used for the select, high priority workloads. With the introduction of the Dell Compellent flash-optimized solutions, Dell changed the economics of flash storage and broke the current pricing boundaries. By offering solutions that can provide performance at the capacity and price of a rotating disk, Dell is making flash storage affordable and accessible to a broader segment of the market.

0

Dell Data Center Networking
The Dell advantage

|	
Cost-effective fabric & core solutions	• First to deliver 32x40GbE in 2RU form-factor • 1/10th the footprint of a conventional chassis • 1/20th the power consumption of a conventional chassis
Maximum capability at the top-of-rack	• Highest-buffering 1GbE top-of-rack • Leading performance for storage interworking (Faster Transactions, Larger Arrays) • Built-in VMware & Citrix hypervisor interoperability
Open, interoperable & easy-to-use	• 100% open, standards-based solutions • Interoperable with Cisco environments • Feature-rich open automation framework • Dell AIM support

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13

Summary: Dell Data Center Networking
Get the most out of your data center
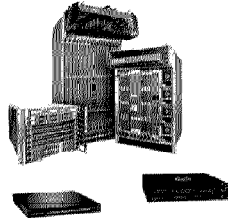
✓ Standards-based products & features—No vendor lock-in

✓ High performance, highly-scalable systems

✓ Proven, reliable operating system with industry standard CLI

✓ Integrated open automation framework

✓ Better together solutions

DELL Force10

14   @Dell_Enterprise   Enterprise Solutions Marketing DELL

14

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EXHIBIT F

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EXHIBIT G

**REDACTED VERSION OF
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EXHIBIT H

**REDACTED VERSION OF
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