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### UNITED STATES DISTRICT COURT DISTRICT OF DELAWARE

REALTIME DATA LLC d/b/a IXO,

Plaintiff,

C.A. No.

Plaint

v.

JURY TRIAL DEMANDED

NASUNI CORPORATION,

Defendant.

# COMPLAINT FOR PATENT INFRINGEMENT <u>AGAINST NASUNI CORPORATION.</u>

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.* in which Plaintiff Realtime Data LLC d/b/a IXO ("Plaintiff," "Realtime," or "IXO") makes the following allegations against Defendant Nasuni Corporation ("Nasuni" or "Defendant"):

#### **PARTIES**

1. Realtime is a limited liability company organized under the laws of the State of New York. Realtime has places of business at 5851 Legacy Circle, Plano, Texas 75024, 1828 E.S.E. Loop 323, Tyler, Texas 75701, and 66 Palmer Avenue, Suite 27, Bronxville, NY 10708. Since the 1990s, Realtime has researched and developed specific solutions for data compression, including, for example, those that increase the speeds at which data can be stored and accessed. As recognition of its innovations rooted in this technological field, Realtime holds 50 United States patents and has numerous pending patent applications. Realtime has licensed patents in this portfolio to many of the world's leading technology companies. The patents-in-suit relate to Realtime's development of advanced systems and methods for fast and efficient data compression using numerous

innovative compression techniques based on, for example, particular attributes of the data.

2. On information and belief, Nasuni is a Delaware corporation with its principal place of business at One Marina Park Drive, Boston, MA 02210. Nasuni can be served through its registered agent, Delaware Corporate Services Inc., 901 N Market St. Suite 705, Wilmington, Delaware 19801.

# JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

4. This Court has personal jurisdiction over Defendant Nasuni in this action because Nasuni is incorporated in Delaware and has committed acts within the District of Delaware giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over Nasuni would not offend traditional notions of fair play and substantial justice. Nasuni, directly and through subsidiaries or intermediaries, has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the asserted patents.

5. Venue is proper in this district under 28 U.S.C. § 1400(b). Upon information and belief, Nasuni is incorporated in Delaware, has transacted business in the District of Delaware, and has committed acts of direct and indirect infringement in the District of Delaware.

### <u>COUNT I</u> <u>INFRINGEMENT OF U.S. PATENT NO. 9,054,728</u>

6. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.

7. Plaintiff Realtime is the owner by assignment of United States Patent No. 9,054,728 ("the '728 Patent") entitled "Data compression systems and methods." The '728 Patent was duly and legally issued by the United States Patent and Trademark Office on June 9, 2015. A true and correct copy of the '728 Patent is included as Exhibit A.

8. On information and belief, Nasuni has offered for sale, sold and/or imported into the United States Nasuni products and services that infringe the '728 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Nasuni's products and services, *e.g.*, UniFS Global File System, Nasuni Edge Appliance, Nasuni Filer, Nasuni Management Console, and the system hardware on which they operate, and all versions and variations thereof since the issuance of the '728 Patent ("Accused Instrumentalities").

9. On information and belief, Nasuni has directly infringed and continues to infringe the '728 Patent, for example, by making, selling, offering for sale, and/or importing the Accused Instrumentalities, and through its own use and testing of the Accused Instrumentalities, which constitute systems for compressing data claimed by Claim 1 of the '728 Patent, comprising: a processor; one or more content dependent data compression encoders; and a single data compression encoder; wherein the processor is configured: to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify

the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block; to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. Upon information and belief, Nasuni uses the Accused Instrumentalities, which are infringing systems, for its own internal non-testing business purposes, while testing the Accused Instrumentalities, and while providing technical support and repair services for the Accused Instrumentalities to Nasuni's customers.

10. On information and belief, Nasuni has had knowledge of the '728 Patent since at least the filing of the original Complaint in this action, or shortly thereafter, and on information and belief, Nasuni knew of the '728 Patent and knew of its infringement, including by way of this lawsuit.

11. Nasuni's affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way on compatible systems to infringe Claim 1 of the '728 Patent, knowing that when the Accused Instrumentalities are used in their ordinary and customary manner with such compatible systems, such systems constitute infringing systems for compressing data comprising; a processor; one or more content dependent data compression encoders; and a single data compression encoder; wherein the processor is configured: to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block; to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. For example, Nasuni explains to customers the benefits of using the Accused Instrumentalities, such as by touting their performance advantages: "UniFS® was designed to leverage the unlimited scale of the cloud, so there is no limit to the number of files. Still, all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or bandwidth." See https://www.nasuni.com/product/faq/. For similar reasons, Nasuni also induces its customers to use the Accused Instrumentalities to infringe other claims of the '728 Patent. Nasuni specifically intended and was aware that the normal and customary use of the Accused Instrumentalities on compatible systems would infringe the '728 Patent. Nasuni performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '728 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Nasuni engaged in such inducement to promote the sales of the Accused Instrumentalities, e.g., through Nasuni's user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '728 Patent. Accordingly, Nasuni has induced and continues to

induce end users of the accused products to use the accused products in their ordinary and customary way with compatible systems to make and/or use systems infringing the '728 Patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '728 Patent.

12. The Accused Instrumentalities include a system for compressing data, comprising a processor. For example, Nasuni UniFS is integrated with storage platforms such as Azure Blob, Amazon S3, or IBM Cloud Object Storage to name a few. *See* Nasuni UniFS - a True Global File System. Cloud storage platforms mentioned above combine tens of thousands of hardware components that include a processor. Moreover, Nasuni Edge Appliance includes a processor with at least 2 cores. *See* Nasuni Edge Appliance.

Physical I	Edge A	Appliance	Specifications
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Model*		NF-60 N2040					N4040			NF-440			NF-600				
	NF-60-2	NF-60-4e	NF-60-6	NF-2040-6	N2040-31	N4040-71	N4040-13f	N4040-13fe	NF-440-12e	NF-440-24e	NF-440-36e	NF-600-8f	NF-600-18f	NF-600-18fe	NF-600-357		
Pricing						Ples	ase contact a Nasi	uni representative o	authorized busines	a partner							
Cache Capacity	2.18	4.18	6 TB	6 TB	3 TB	7.18	13 TB	1378	12.18	24 TB	36 TB	H TB	18 TB	1878	35 TB		
Disk Physical Capacity	2x2 TB 3.5'	2x4 TB 3.5"	4x2 TB 3.5'	2 TB 3.5'	4x960 GB 2.5" SSD	8x960 08 2.5" 550	8x1.92 TB 2.5" SSD	8x1.92 TB 2.5" SED SSD's	12x1.2 TB 2.5°	24x1.2 TB 2.5'	24x1.8 TB 2.5'	10x960 GB 2.5' SSD	10x1.92 TB 2.5" SSD	10x 1.92 TB 2.5" SED SSDs	10x3.84 T8 2.5*550		
Rear Expansion Tray		NA		N					COW 2x1.2 TB COW 2x1.2 TB COW 2x1.8 TB SED HDDs SED HDDs SED HDDs SED HDDs			NA					
Disk Encryption*	NA	FIPS-140-2	NA	NA	NA	NA	NA	FIP5-140-2		FIP5-140-2		NA	NA.	FIPS-140-2	NA		
HOD Speed		7.2K RPM		7.2K RPM	NA		NA.			10K RPM				NA			
Drive Configuration	RAID1	RAID1	RAID5	RAI	DS		RAIDS			RAID6			R	AID5			
Memory		16 GB		64 0	201		128 G8			64 GB			12	# GØ			
Processors	intel P	Pentium G4600 3 2-core CPU	6GHz,	Intel Xeon Silve B-core		2 x int	al Xeon Silver 411 10-core CPUs	4 2.20,	Zxintel Xeon E5-2640 v3 2.6GHz, 8-core CPUs			2xintel Xeon E5-2650 v3 2.3GHz, 10-core CPUs					

13. The Accused Instrumentalities include a system for compressing data, comprising one or more content dependent data compression encoders. For example, the Accused Instrumentalities perform block-level deduplication, which is a content dependent data compression encoder. For example, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have

changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System. Performing deduplication results in compression by representing data with fewer bits.

14. The Accused Instrumentalities comprise a single data compression encoder. For example, Nasuni states "[A]s files and directories are created, data is chunked, de-duplicated, compressed, and encrypted, then stored as objects in the cloud." *See* Nasuni UniFS - a True Global File System. Moreover, Nasuni further explains that "[C]ompression of every chunk before transmission removes extraneous data, further reducing bandwidth needs." *See* Nasuni UniFS - a True Global File System.

15. The Accused Instrumentalities analyze data within a data block to identify one or more parameters or attributes of the data, for example, whether the data is duplicative of data previously transmitted and/or stored, where the analysis does not rely only on the descriptor. For example, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System.

16. The Accused Instrumentalities perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified. For example, Nasuni discloses UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file

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that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System.

Nasuni further specifiy that "[B]efore sending data to the cloud, Nasuni breaks files into optimally-sized chunks that are than deduplicated to improve performance." *See* Nasuni Management Console Guide.

17. The Accused Instrumentalities perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. For example, Nasuni states "[A]s files and directories are created, data is chunked, de-duplicated, compressed, and encrypted, then stored as objects in the cloud." *See* Nasuni UniFS - a True Global File System. Moreover, Nasuni further explains that "[C]ompression of every chunk before transmission removes extraneous data, further reducing bandwidth needs." *See* Nasuni UniFS - a True Global File System.

18. Nasuni also infringes other claims of the '728 Patent, directly and through inducing infringement and contributory infringement.

19. On information and belief, use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the methods claimed by the '728 Patent.

20. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Nasuni has injured Realtime and is liable to Realtime for infringement of the '728 Patent pursuant to 35 U.S.C. § 271.

21. As a result of Nasuni's infringement of the '728 Patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Nasuni's

infringement, but in no event less than a reasonable royalty for the use made of the invention by Nasuni, together with interest and costs as fixed by the Court.

### <u>COUNT II</u> <u>INFRINGEMENT OF U.S. PATENT NO. 9,667,751</u>

22. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.

23. Plaintiff Realtime is the owner by assignment of United States Patent No. 9,667,751 ("the '751 Patent") entitled "Data feed acceleration." The '751 Patent was duly and legally issued by the United States Patent and Trademark Office on May 30, 2017. A true and correct copy of the '751 Patent is included as Exhibit B.

24. On information and belief, Nasuni has offered for sale, sold and/or imported into the United States Nasuni products and services that infringe the '751 patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Nasuni's products and services, *e.g.*, UniFS Global File System, Nasuni Edge Appliance, Nasuni Filer, Nasuni Management Console, and the system hardware on which they operate, and all versions and variations thereof since the issuance of the '751 Patent ("Accused Instrumentalities").

25. On information and belief, Nasuni has directly infringed and continues to infringe the '751 Patent, for example, through its own use and testing of the Accused Instrumentalities, which in the ordinary course of their operation form a system for compressing data claimed by Claim 25 of the '751 Patent, including: a data server implemented on one or more processors and one or more memory systems; the data server configured to analyze content of a data block to identify a parameter, attribute, or value of the data block that excludes analysis based solely on reading a descriptor; the

data server configured to select an encoder associated with the identified parameter, attribute, or value; the data server configured to compress data in the data block with the selected encoder to produce a compressed data block, wherein the compression utilizes a state machine; and the data server configured to store the compressed data block; wherein the time of the compressing the data block and the storing the compressed data block is less than the time of storing the data block in uncompressed form. Upon information and belief, Nasuni uses the Accused Instrumentalities, which are infringing systems, for its own internal non-testing business purposes, while testing the Accused Instrumentalities, and while providing technical support and repair services for the Accused Instrumentalities to Nasuni's customers.

26. On information and belief, Nasuni has had knowledge of the '751 Patent since at least the filing of the original Complaint in this action, or shortly thereafter, and on information and belief, Nasuni knew of the '751 Patent and knew of its infringement, including by way of this lawsuit.

27. Upon information and belief, Nasuni's affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe Claim 25 of the '751 Patent by making or using a data server implemented on one or more processors and one or more memory systems; the data server configured to analyze content of a data block to identify a parameter, attribute, or value of the data block that excludes analysis based solely on reading a descriptor; the data server configured to select an encoder associated with the identified parameter,

attribute, or value; the data server configured to compress data in the data block with the selected encoder to produce a compressed data block, wherein the compression utilizes a state machine; and the data server configured to store the compressed data block; wherein the time of the compressing the data block and the storing the compressed data block is less than the time of storing the data block in uncompressed form. For example, Nasuni explains to customers the benefits of using the Accused Instrumentalities, such as by touting their efficiency: "UniFS® was designed to leverage the unlimited scale of the cloud, so there is no limit to the number of files. Still, all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or bandwidth." See https://www.nasuni.com/product/faq/. For similar reasons, Nasuni also induces its customers to use the Accused Instrumentalities to infringe other claims of the '751 Patent. Nasuni specifically intended and was aware that these normal and customary activities would infringe the '751 Patent. Nasuni performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '751 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Nasuni engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Nasuni has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '751 Patent, knowing that such use constitutes infringement of the '751 Patent.

28. The Accused Instrumentalities include a system for compressing data. For example, Nasuni "takes any new or changed data, then chunks, deduplicates, compresses

and encrypts this data before pushing it to the cloud" See https://www.nasuni.com/product/faq/.

29. The Accused Instrumentalities include a data server implemented on one or more processors and one or more memory systems. For example, Nasuni UniFS is integrated with storage platforms such as Azure Blob, Amazon S3, or IBM Cloud Object Storage to name a few. *See* Nasuni UniFS - a True Global File System. Cloud storage platforms mentioned above combine tens of thousands of hardware components that include one or more processors and memory systems. Moreover, Nasuni Edge Appliance includes one or more processors and memory systems. *See* Nasuni Edge Appliance.

Physical Edge Appliance Specifications

				N20	40					NF-440						
Model*	NF-60-2	NF-60-4e	NF-60-6	NF-2040-6	N2040-31	N4040-71	N4040-13f	N4040-13fe	NF-440-12e	NF-440-24e	NF-440-36e	NF-600-8f	NF-600-18f	NF-600-18fe	NF-600-35/	
Pricing						Ples	ase contact a Nas	uni representative o	authorized busines	a partner						
Cache Capacity	2 TB	4.18	6 TB	6 TB	3 TB	7.18	13 TB	13TB	12.18	24 TB	36 TB	II TB	18 TB	1878	35 TB	
Disk Physical Capacity	2x2 TB 3.5"	2x4 TB 3.5"	4x2 TB 3.51	2 TB 3.5'	4x960 G8 2.5" SSD	8x960 G8 2.5" SSD	8x1.92 TB 2.5" SSD	8x1.92 TB 2.5" SED SSD's	12x1.2 TB 2.5"	24x1.2 TB 2.5'	24s1.8 TB 2.5'	10x960 GB 2.5' SSD	10x1.92 TB 2.5" SSD	10x 1.92 TB 2.5" SED SSDs	10x3.84 TB 2.5" 5SD	
Rear Expansion Tray		NA		N			NA		COW 2x1.2 TB SED HDDs	COW 2x1.2 TB SED HDDs	COW 2x1.8 TB SED HDDs			NA		
Disk Encryption*	NA	FIPS-140-2	NA	NA	NA	NA	NA	FIP5-140-2		FIP5-140-2		NA	NA.	FIPS-140-2	NA NA	
HOD Speed		7.2K RPM		7.2K RPM	NA		NA.			10K RPM				NA		
Drive Configuration	RAID1	RAID1	RAID5	RAI	DS.		RAIDS			RAID6			R	AIDS		
Memory		16 GII		64 (	20		128 GB			64 GB			12	8 G0		
Processors	intel P	Pentium G4600 3. 2-core CPU	6GHz,	Intel Xeon Silv B-core		2 x Int	el Xeon Silver 411 10-core CPUs	4 2.26,	2xintel Xeon E5-2640 v3 2.6GHz, 2xintel Xeon E5-2650 v 8-core CPUs 10-core CPUs							

On information and belief, all of the Accused Instrumentalities use one or more memory systems in substantially the same way.

30. The Accused Instrumentalities include a data server configured to analyze content of a data block to identify a parameter, attribute, or value of the data block that excludes analysis based solely on reading a descriptor. For example, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File

System. Performing deduplication results in compression by representing data with fewer bits.

31. The Accused Instrumentalities include a data server configured to select an encoder associated with the identified parameter, attribute, or value. For example, the Accused Instrumentalities select between deduplication or other compression. For example, Nasuni "deduplicates, compresses and encrypts this data before pushing it to the cloud" *See* <u>https://www.nasuni.com/product/faq/</u>. In particular, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System.

32. The Accused Instrumentalities include a data server configured to compress data in the data block with the selected encoder to produce a compressed data block, wherein the compression utilizes a state machine. For example, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System.

33. The Accused Instrumentalities include a data server configured to store the compressed data block. For example, Nasuni states "[A]s files and directories are created, data is chunked, de-duplicated, compressed, and encrypted, then stored as objects

in the cloud." *See* Nasuni UniFS - a True Global File System. On information and belief, all of the Accused Instrumentalities include a data server configured to store the compressed data block in substantially the same way.

34. The time of the compressing the data block and the storing the compressed data block in the Accused Instrumentalities is less than the time of storing the data block in uncompressed form. Due to the data reduction and acceleration features of the specific compression algorithms used, the time of the compressing the data block and the storing the compressed data block is less than the time of storing the data block in uncompressed form. For example, Nasuni specifies that "[B]efore sending data to the cloud, Nasuni breaks files into optimally-sized chunks that are than deduplicated to improve performance." *See* Nasuni Management Console Guide. As another example, Nasuni discloses that "all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or bandwidth." *See* https://www.nasuni.com/product/faq/.

35. On information and belief, Nasuni also infringes, directly and through induced infringement, and continues to infringe other claims of the '751 Patent.

36. On information and belief, use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the methods claimed by the '751 Patent.

37. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Nasuni has injured Realtime and is liable to Realtime for infringement of the '751 Patent pursuant to 35 U.S.C. § 271.

38. As a result of Nasuni's infringement of the '751 Patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Nasuni's infringement, but in no event less than a reasonable royalty for the use made of the invention by Nasuni, together with interest and costs as fixed by the Court.

# <u>COUNT III</u> <u>INFRINGEMENT OF U.S. PATENT NO. 7,415,530</u>

39. Plaintiff realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.

40. Plaintiff Realtime is the owner by assignment of United States Patent No. 7,415,530 ("the '530 Patent") entitled "System and methods for accelerated data storage and retrieval." The '530 Patent was duly and legally issued by the United States Patent and Trademark Office on August 19, 2008. A true and correct copy of the '530 Patent is included as Exhibit C.

41. On information and belief, Nasuni has made, used, offered for sale, sold and/or imported into the United States Nasuni products that infringe the '530 Patent, and continues to do so. By way of illustrative example, these infringing products include, without limitation, Nasuni's products and services, e.g., UniFS Global File System, Nasuni Edge Appliance, Nasuni Filer, Nasuni Management Console, and the system hardware on which they operate, and all versions and variations thereof since the issuance of the '530 patent ("Accused Instrumentality").

42. On information and belief, Nasuni has directly infringed and continues to infringe the '530 Patent, for example, through its own use and testing of the Accused Instrumentality, which constitutes a system comprising: a memory device; and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream

is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block. Upon information and belief, Nasuni uses the Accused Instrumentality, an infringing system, for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support and repair services for the Accused Instrumentality to Nasuni's customers.

43. On information and belief, Nasuni has had knowledge of the '530 Patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, Nasuni knew of the '530 Patent and knew of its infringement, including by way of this lawsuit.

44. Upon information and belief, Nasuni's affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe Claim 1 of the '530 Patent by making or using a system comprising: a

memory device; and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block.

45. For example, Nasuni explains to customers the benefits of using the Accused Instrumentality: "UniFS® was designed to leverage the unlimited scale of the cloud, so there is no limit to the number of files. Still, all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or bandwidth." *See* <u>https://www.nasuni.com/product/faq/</u>.

46. Nasuni also induces its customers to use the Accused Instrumentalities to infringe other claims of the '530 Patent. Nasuni specifically intended and was aware that these normal and customary activities would infringe the '530 Patent. Nasuni performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '530 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Nasuni engaged in such inducement to promote the use of the Accused

Instrumentalities. Accordingly, Nasuni has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '530 Patent, knowing that such use constitutes infringement of the '530 Patent.

47. Nasuni also indirectly infringes the '530 Patent by manufacturing, using, selling, offering for sale, and/or importing the accused products, with knowledge that the accused products were and are especially manufactured and/or especially adapted for use in infringing the '530 Patent and are not a staple article or commodity of commerce suitable for substantial non-infringing use. On information and belief, the Accused Instrumentality is designed to function with compatible hardware to create a system comprising: a memory device; and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block. Because the Accused Instrumentality is designed to operate as the claimed system for compressing, the Accused Instrumentality has no substantial noninfringing uses, and any other uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental. Nasuni's manufacture, use, sale, offering for sale, and/or importation of the Accused Instrumentality constitutes contributory infringement of the '530 Patent.

48. The Accused Instrumentality includes the memory device and includes the data accelerator, wherein said data accelerator is coupled to said memory device. For example, Nasuni UniFS is integrated with storage platforms such as Azure Blob, Amazon S3, or IBM Cloud Object Storage to name a few. *See* Nasuni UniFS - a True Global File System. Cloud storage platforms mentioned above combine tens of thousands of hardware components that include a memory device. Moreover, Nasuni Edge Appliance includes one or more memory devices. *See* Nasuni Edge Appliance.

Physica	Edge	Appliance	Specifications	
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Model*		NF-60 N2040				N4040			NF-440			NF-600				
	NF-60-2	NF-60-4e	NF-60-6	NF-2040-6	N2040-31	N4040-71	N4040-13f	N4040-13fe	NF-440-12e	NF-440-24e	NF-440-36e	NF-600-8f	NF-600-18f	NF-600-18fe	NF-600-35/	
Pricing						Plei	se contact a Nasi	uvi representative or	authorized busines	a partner						
Cache Capacity	2.18	4.18	6 TB	6 TB	3 TB	7.18	13 TB	13TB	12.18	24 TB	36 TB	H TB	18 TB	18TB	35 TB	
Disk Physical Capacity	2x2 TB 3.5'	2x4 TB 3.5"	4x2 TB 3.5'	2 TB 3.5'	4x960 GB 2.5" SSD	8x960 08 2.5" 550	8x1.92 TB 2.5" SSD	8x1.92 TB 2.5" SED 5SD/8	12x1.2 TB 2.5°	24x1.2 TB 2.5'	24x1.8 TB 2.57	10x960 GB 2.5' SSD	10x1.92 TB 2.5" SSD	10x 1.92 TB 2.5" SED SSDs	10x3.84 T8 2.5° 550	
Rear Expansion Tray		NA		N					COW 2x1.2 TB SED HDDs	COW 2x1.2 TB SED HDDs	COW 2x1.8 TB SED HDDs	NA				
Disk Encryption*	NA	FIPS-140-2	NA	NA	NA	NA	NA	FIPS-140-2		FIP5-140-2		NA	NA.	FIPS-140-2	NA	
HOD Speed		7.2K RPM		7.2K RPM	NA		NA.			10K RPM				A.		
Drive Configuration	RAID1	RAID1	RAID5	RAI	25		RAID5			RAID6			R	ND5		
Memory		16 GB		64 (	20		128 G8			64 GB			12	8 GØ		
Processors	intel P	Pentium G4600 3 2-core CPU	6GHz,	Intel Xeon Silv B-core		2 x int	2 x Intel Xeon Silver 4114 2.20, 10-core CPUs			2xintel Xeon E5-2640 v3 2.6GHz, B-core CPUs			2xintel Xeon E5-2650 v3 2.3GHz, 10-core CPUs			

Furthermore, Nasuni data deduplication and compression systems are coupled to a memory device. For example, Nasuni "takes any new or changed data, then chunks, deduplicates, compresses and encrypts this data before pushing it to the cloud" *See* <u>https://www.nasuni.com/product/faq/</u>.

49. The Accused Instrumentality receives an incoming stream of data. For example, Nasuni discloses that "[A]s files and directories are created, data is chunked..." *See* Nasuni UniFS - a True Global File System. As such, Nasuni further specifies that

"[B]efore sending data to the cloud, Nasuni breaks files into optimally-sized chunks that are than deduplicated to improve performance." *See* Nasuni Management Console Guide.

50. The Accused Instrumentality's received data stream comprise more than one data block. For example, Nasuni specifies that "[B]efore sending data to the cloud, Nasuni breaks files into optimally-sized chunks that are than deduplicated to improve performance." *See* Nasuni Management Console Guide.

51. The Accused Instrumentality compresses said data stream to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique. For example, Nasuni states that "[A]s files and directories are created, data is chunked, deduplicated, compressed...." *See* Nasuni UniFS - a True Global File System. More specifically, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System. Moreover, Nasuni performs "[C]ompression of every chunk before transmission removes extraneous data, further reducing bandwidth needs." *See* Nasuni UniFS - a True Global File System.

52. The first and second compression techniques used by the Accused Instrumentality described above are different. For example, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Subfile chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System. Moreover, Nasuni performs "[C]ompression of every chunk before transmission removes extraneous data, further reducing bandwidth needs." *See* Nasuni UniFS - a True Global File System.

53. After compression, said compressed data stream is stored on said memory device. For example, Nasuni states that "[A]s files and directories are created, data is chunked, de-duplicated, compressed, and encrypted, then stored as objects in the cloud." *See* Nasuni UniFS - a True Global File System.

54. Said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form. For example, Nasuni specifies that "[B]efore sending data to the cloud, Nasuni breaks files into optimally-sized chunks that are than deduplicated to improve performance." *See* Nasuni Management Console Guide. As another example, Nasuni discloses that "all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or bandwidth." *See* <u>https://www.nasuni.com/product/faq/</u>.

55. The Accused Instrumentality stores a first data descriptor on said memory device indicative of said first compression technique. For example, Nasuni provides that "[A]s files and directories are created, data is chunked, de-duplicated, compressed, and encrypted, then stored as objects in the cloud." *See* Nasuni UniFS - a True Global File System. In particular, Nasuni discloses during that deduplication file changes are compared "not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only

the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System.

56. On information and belief, Nasuni also infringes, directly and through induced infringement and contributory infringement, and continues to infringe other claims of the '530 Patent.

57. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the methods claimed by the '530 Patent.

58. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Nasuni has injured Realtime and is liable to Realtime for infringement of the '530 Patent pursuant to 35 U.S.C. § 271.

59. As a result of Nasuni's infringement of the '530 Patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Nasuni's infringement, but in no event less than a reasonable royalty for the use made of the invention by Nasuni, together with interest and costs as fixed by the Court.

#### <u>COUNT IV</u> <u>INFRINGEMENT OF U.S. PATENT NO. 9,116,908</u>

60. Plaintiff Realtime realleges and incorporates by reference the foregoing paragraphs, as if fully set forth herein.

61. Plaintiff Realtime is the owner by assignment of United States Patent No. 9,116,908 ("the '908 Patent") entitled "System and methods for accelerated data storage and retrieval." The '908 Patent was duly and legally issued by the United States Patent and Trademark Office on August 25, 2015, and Claims 1, 2, 4-6, 9, 11, 21, 22, 24, and 25

of the '908 Patent confirmed as patentable in a Final Written Decision of the Patent Trial and Appeal Board on October 31, 2017. A true and correct copy of the '908 Patent is included as Exhibit D.

62. On information and belief, Nasuni has offered for sale, sold and/or imported into the United States Nasuni products and services that infringe the '908 Patent, and continues to do so. By way of illustrative example, these infringing products and services include, without limitation, Nasuni's products and services, *e.g.*, UniFS Global File System, Nasuni Edge Appliance, Nasuni Filer, Nasuni Management Console, and the system hardware on which they operate, and all versions and variations thereof since the issuance of the '908 Patent (the "Accused Instrumentality").

63. On information and belief, Nasuni has directly infringed and continues to infringe the '908 Patent, for example, through its own use and testing of the Accused Instrumentality, which constitutes a system comprising: a memory device; and a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block; wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form. Upon information and belief, Nasuni uses the Accused Instrumentality, an infringing system, for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support and repair services for the Accused Instrumentality to Nasuni's customers.

64. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the systems claimed by the '908 Patent.

65. On information and belief, Nasuni has had knowledge of the '908 Patent since at least the filing of this First Amended Complaint or shortly thereafter, and on information and belief, Nasuni knew of the '908 Patent and knew of its infringement, including by way of this lawsuit.

66. Upon information and belief, Nasuni's affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe Claim 1 of the '908 Patent by making or using a system comprising: a memory device; and a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block; wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form. For example, Nasuni explains to customers the benefits of using the Accused Instrumentalities, such as by touting their performance advantages: "UniFS® was designed to leverage the unlimited scale of the cloud, so there is no limit to the number of files. Still, all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or

bandwidth." See https://www.nasuni.com/product/faq/. For similar reasons, Nasuni also induces its customers to use the Accused Instrumentalities to infringe other claims of the '908 Patent. Nasuni specifically intended and was aware that these normal and customary activities would infringe the '908 Patent. Nasuni performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '908 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Nasuni engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Nasuni has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '908 Patent, knowing that such use constitutes infringement of the '908 Patent.

67. The Accused Instrumentality includes a memory device and a data accelerator configured to compress: (i) a first data block with a first compression technique (e.g., deduplication) to provide a first compressed data block; and (ii) a second data block with a second compression technique (e.g., another compression), different from the first compression technique, to provide a second compressed data block. For example, Nasuni UniFS is integrated with storage platforms such as Azure Blob, Amazon S3, or IBM Cloud Object Storage to name a few. *See* Nasuni UniFS - a True Global File System. Cloud storage platforms mentioned above combine tens of thousands of hardware components that include a memory device. Moreover, Nasuni Edge Appliance includes one or more memory devices. *See* Nasuni Edge Appliance.

Physica	I Edge	Appliance	Specifications
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Model*				N20	40	N4040			NF-440							
	NF-60-2	NF-60-4e	NF-60-6	NF-2040-6	N2040-31	N4040-71	N4040-13f	N4040-13fe	NF-440-12e	NF-440-24e	NF-440-36e	NF-600-8f	NF-600-18f	NF-600-18fe	NF-600-357	
Pricing						Ples	se contact a Nasi	uni representative or	authorized busines	is partner						
Cache Capacity	2 TB	4 TB	6 TB	6 TB	3 TB	7.18	13 TB	13TB	12 TB	24 TB	36 TB	E TB	18 TB	18TB	35 TB	
Disk Physical Capacity	2x2 TB 3.5*	2x4 TB 3.5"	4x2 TB 3.5'	2 TB 3.5'	4x960 GB 2.5" SSD	8x960 G8 2.5" SSD	8x1.92 TB 2.5" SSD	8x1.92 TB 2.5" SED 5SD/8	12x1.2 TB 2.5"	24x1.2 TB 2.5'	24x1.8 T8 2.5'	10x960 GB 2.5' SSD	10x1.92 TB 2.5" SSD	10x 1.92 TB 2.5" SED SSDs	10x3.84 T8 2.5" 550	
Rear Expansion Tray		NA		N	A	NA			COW 2x1.2 TB COW 2x1.2 TB COW 2x1.8 TB SED HDDs SED HDDs SED HDDs SED HDDs			NA				
Disk Encryption*	NA	FIPS-140-2	NA	NA	NA	NA	NA	FIPS-140-2		FIP5-140-2		NA	NA.	FIPS-140-2	NA	
HOD Speed		7.2K RPM		7.2K RPM	NA		NA.			10K RPM				NA		
Drive Configuration	RAID1	RAID1	RAIDS	RAI	DS		RAIDS			RAID6			RJ	AID5		
Memory		16 GB		64 (	\$11		128 G8			64 GB			12	8 GØ		
Processors	Intel P	Pentium G4600 3. 2-core CPU	6GHz,	Intel Xeon Silv B-core		2 x Int	el Xeon Silver 411 10-core CPUs	4 2.26,	Zxint	el Xeon E5-2640 v3 3 8-core CPUs	6GHz			52650 v3 2.3GHz, re CPUs		

Furthermore, Nasuni data deduplication and compression systems are coupled to a memory device. For example, Nasuni "takes any new or changed data, then chunks, deduplicates, compresses and encrypts this data before pushing it to the cloud" *See* <u>https://www.nasuni.com/product/faq/</u>. In addition, Nasuni states that "[A]s files and directories are created, data is chunked, de-duplicated, compressed...." *See* Nasuni UniFS - a True Global File System. More specifically, Nasuni discloses that UniFS performs deduplication, which compares "file changes not just locally, but to every file stored in the cloud – dramatically reducing the amount of data that needs to be sent. Sub-file chunking ensures UniFS transmits only the deduplicated parts of a file that have changed instead of the whole new version." *See* Nasuni UniFS - a True Global File System. Moreover, Nasuni performs "[C]ompression of every chunk before transmission removes extraneous data, further reducing bandwidth needs." *See* Nasuni UniFS - a True Global File System.

68. The Accused Instrumentality stores the compressed first and second data blocks on the memory device. For example, Nasuni states that "[A]s files and directories are created, data is chunked, de-duplicated, compressed, and encrypted, then stored as objects in the cloud." *See* Nasuni UniFS - a True Global File System. The compression and storage occurs faster than the first and second data blocks are able to be stored on the

memory device in uncompressed form. For example, Nasuni specifies that "[B]efore sending data to the cloud, Nasuni breaks files into optimally-sized chunks that are than deduplicated to improve performance." *See* Nasuni Management Console Guide. As another example, Nasuni discloses that "all data is chunked, compressed and deduplicated before being sent to the cloud to ensure that enterprises aren't paying for unnecessary storage or bandwidth." *See* https://www.nasuni.com/product/faq/.

69. On information and belief, Nasuni also infringes, directly and through induced infringement, and continues to infringe other claims of the '908 Patent.

70. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Nasuni has injured Realtime and is liable to Realtime for infringement of the '908 Patent pursuant to 35 U.S.C. § 271.

71. As a result of Nasuni's infringement of the '908 Patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Nasuni's infringement, but in no event less than a reasonable royalty for the use made of the invention by Nasuni, together with interest and costs as fixed by the Court.

#### PRAYER FOR RELIEF

WHEREFORE, Plaintiff Realtime respectfully requests that this Court enter:

a. A judgment in favor of Plaintiff that Nasuni has infringed, either literally and/or under the doctrine of equivalents, the '728 Patent, the '751 Patent, the '530 Patent, and the '908 Patent;

b. A permanent injunction prohibiting Nasuni from further acts of infringement of the '728 Patent, the '751 Patent, the '530 Patent, and the '908 Patent;

c. A judgment and order requiring Nasuni to pay Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for its infringement of the '728 Patent, the '751 Patent, the '530 Patent, and the '908 Patent; and

d. A judgment and order requiring Nasuni to provide an accounting and to pay supplemental damages to Realtime, including without limitation, prejudgment and post-judgment interest;

e. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Defendants; and

f. Any and all other relief as the Court may deem appropriate and just under the circumstances.

# **DEMAND FOR JURY TRIAL**

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: August 7, 2018

OF COUNSEL

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