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12 *Attorneys for Plaintiff*
13 *Data Scape Limited*

14 **UNITED STATES DISTRICT COURT**
15 **EASTERN DISTRICT OF CALIFORNIA**
16 **FRESNO DIVISION**

17 DATA SCAPE LIMITED,
18 Plaintiff,
19
20 vs.
21 BARRACUDA NETWORKS INC.,
22 Defendant.

Case No. 1:19-at-00100

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL DEMANDED

23 This is an action for patent infringement arising under the Patent Laws of the
24 United States of America, 35 U.S.C. § 1 *et seq.* in which Plaintiff Data Scape Limited
25 (“Plaintiff,” “Data Scape”) makes the following allegations against Defendant
26 Barracuda Networks, Inc. (“Defendant” or “Barracuda”):

PARTIES

- 27 1. Data Scape is a company organized under the laws of Ireland with its office
28 located at Office 115, 4-5 Burton Hall Road, Sandyford, Dublin 18, Ireland.
2. On information and belief, Barracuda is a Delaware corporation with its

1 principal place of business at 3175 Winchester Blvd, Campbell, CA 95008. Barracuda
2 has regular and established places of business in this District, including, e.g., at 7170
3 N. Financial Dr. #124, Fresno, 93720. E.g.,
4 <https://www.facebook.com/pages/Barracuda-Networks/256485501050583>;
5 <https://www.barracuda.com/company/contact/> Barracuda offers its products and/or
6 services, including those accused herein of infringement, to customers and potential
7 customers located in California and in this District. Barracuda can be served with
8 process through its registered agent, the Corporation Service Company Which will Do
9 Business in California as CSC-Lawyers Incorporating Service, 2710 Gateway Oaks
10 Drive, Suite 150N, Sacramento, California 95833-3505.

11 **JURISDICTION AND VENUE**

12 3. This action arises under the patent laws of the United States, Title 35 of
13 the United States Code. This Court has original subject matter jurisdiction pursuant to
14 28 U.S.C. §§ 1331 and 1338(a).

15 4. This Court has personal jurisdiction over Barracuda in this action because
16 Barracuda has committed acts within the Eastern District of California giving rise to
17 this action and has established minimum contacts with this forum such that the exercise
18 of jurisdiction over Barracuda would not offend traditional notions of fair play and
19 substantial justice. Barracuda, directly and through subsidiaries or intermediaries, has
20 committed and continues to commit acts of infringement in this District by, among other
21 things, offering to sell and selling products and/or services that infringe the asserted
22 patents.

23 5. Venue is proper in this district under 28 U.S.C. § 1400(b). Barracuda is
24 registered to do business in California, and upon information and belief, Barracuda has
25 transacted business in the Eastern District of California and has committed acts of direct
26 and indirect infringement in the Eastern District of California. Barracuda has regular
27 and established place(s) of business in this District, as set forth above.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 7,720,929

1
2
3 6. Plaintiff realleges and incorporates by reference the foregoing paragraphs,
4 as if fully set forth herein.

5 7. Data Scape is the owner by assignment of United States Patent No.
6 7,720,929 (“the ’929 Patent”) entitled “Communication System And Its Method and
7 Communication Apparatus And Its Method.” The ’929 Patent was duly and legally
8 issued by the United States Patent and Trademark Office on May 18, 2010. A true and
9 correct copy of the ’929 Patent is included as Exhibit A.

10 8. On information and belief, Barracuda has offered for sale, sold and/or
11 imported into the United States Barracuda products and services that infringe the ’929
12 patent, and continues to do so. By way of illustrative example, these infringing products
13 and services include, without limitation, Barracuda’s products and services, *e.g.*,
14 Barracuda Backup Physical Appliance Models 190, 295, 290,390, 490, 690, 790, 890,
15 895, 990, 995, 1090, 6090, 8090, 9090, 10090, Barracuda Backup Virtual Appliances,
16 Barracuda Cloud, and all versions and variations thereof since the issuance of the ’929
17 Patent (“Accused Instrumentalities”).

18 9. On information and belief, Barracuda has directly infringed and continues
19 to infringe the ’929 Patent, for example, by making, selling, offering for sale, and/or
20 importing the Accused Instrumentalities, and through its own use and testing of the
21 Accused Instrumentalities, which constitute communication system of Claim 1 of
22 the ’929 Patent comprising: a first apparatus having a first storage medium, and a
23 second apparatus, said second apparatus comprising: a second storage medium
24 configured to store management information of data to be transferred to said first
25 storage medium, a communicator configured to communicate data with said first
26 apparatus, a detector configured to detect whether said first apparatus and said second
27 apparatus are connected, an editor configured to select certain data to be transferred and
28 to edit said management information based on said selection without regard to the

1 connection of said first apparatus, and a controller configured to control transfer of the
2 selected data stored in said second apparatus via said communicator based on said
3 management information edited by said editor when said detector detects that said first
4 apparatus and said second apparatus are connected, wherein said controller is
5 configured to compare said management information edited by said editor with
6 management information of data stored in said first storage medium and to transmit data
7 in said second apparatus based on the results of the comparison. Upon information and
8 belief, Barracuda uses the Accused Instrumentalities, which are infringing systems, for
9 its own internal non-testing business purposes, while testing the Accused
10 Instrumentalities, and while providing technical support and repair services for the
11 Accused Instrumentalities to Barracuda's customers.

12 10. On information and belief, Barracuda has had knowledge of the '929
13 Patent since at least the filing of the original Complaint in this action, or shortly
14 thereafter, and on information and belief, Barracuda knew of the '929 Patent and knew
15 of its infringement, including by way of this lawsuit. By the time of trial, Barracuda will
16 have known and intended (since receiving such notice) that their continued actions
17 would actively induce and contribute to the infringement of the claims of the '929
18 Patent.

19 11. On information and belief, use of the Accused Instrumentalities in their
20 ordinary and customary fashion results in infringement of the claims of the '929 Patent.

21 12. Barracuda's affirmative acts of making, using, selling, offering for sale,
22 and/or importing the Accused Instrumentalities have induced and continue to induce
23 users of the Accused Instrumentalities to use the Accused Instrumentalities in their
24 normal and customary way to infringe the claims of the '929 Patent, knowing that when
25 the Accused Instrumentalities are used in their ordinary and customary manner, such
26 systems constitute infringing communication systems comprising: a first apparatus
27 having a first storage medium, and a second apparatus, said second apparatus
28 comprising: a second storage medium configured to store management information of

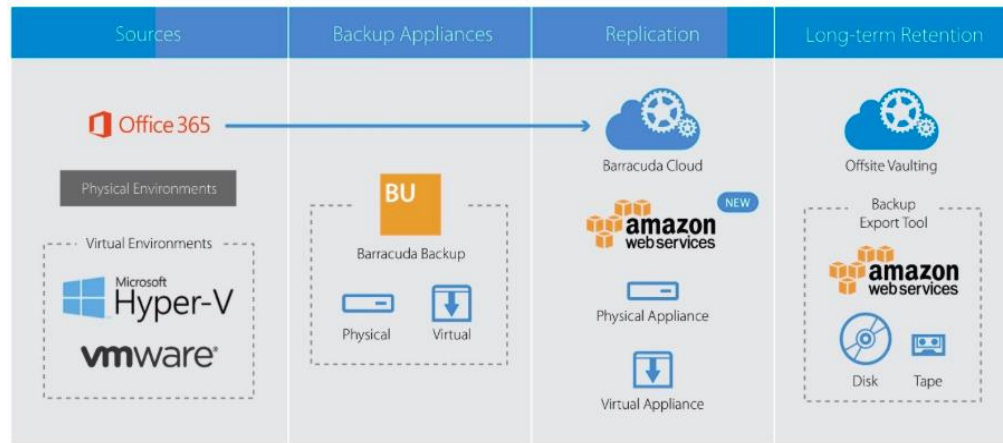
1 data to be transferred to said first storage medium, a communicator configured to
2 communicate data with said first apparatus, a detector configured to detect whether said
3 first apparatus and said second apparatus are connected, an editor configured to select
4 certain data to be transferred and to edit said management information based on said
5 selection without regard to the connection of said first apparatus, and a controller
6 configured to control transfer of the selected data stored in said second apparatus via
7 said communicator based on said management information edited by said editor when
8 said detector detects that said first apparatus and said second apparatus are connected,
9 wherein said controller is configured to compare said management information edited
10 by said editor with management information of data stored in said first storage medium
11 and to transmit data in said second apparatus based on the results of the comparison.
12 For example, Barracuda explains to customers the benefits of using the Accused
13 Instrumentalities, such as by touting their advantages: “Barracuda Backup enables
14 business to run seamlessly by minimizing downtime and preventing data loss, providing
15 the industry’s easiest to deploy and manage all-in-one data protection solution.”
16 https://www.barracuda.com/resources/Barracuda_Backup_DS_US. Barracuda further
17 notes that “Barracuda Backup lets you protect against local disasters and data loss by
18 using the cloud to simply and cost-effectively get data off-site. It lets you securely and
19 efficiently replicate data to the Barracuda Cloud, a remote physical backup appliance,
20 a remote virtual backup appliance, or AWS for off-site protection.”
21 <https://www.barracuda.com/products/backup>. Barracuda also induces its customers to
22 use the Accused Instrumentalities to infringe other claims of the ’929 Patent. Barracuda
23 specifically intended and was aware that the normal and customary use of the Accused
24 Instrumentalities on compatible systems would infringe the ’929 Patent. Barracuda
25 performed the acts that constitute induced infringement, and would induce actual
26 infringement, with the knowledge of the ’929 Patent and with the knowledge, or willful
27 blindness to the probability, that the induced acts would constitute infringement. On
28 information and belief, Barracuda engaged in such inducement to promote the sales of

1 the Accused Instrumentalities, *e.g.*, through Barracuda’s user manuals, product support,
2 marketing materials, demonstrations, installation support, and training materials to
3 actively induce the users of the accused products to infringe the ’929 Patent.
4 Accordingly, Barracuda as induced and continues to induce end users of the accused
5 products to use the accused products in their ordinary and customary way with
6 compatible systems to make and/or use systems infringing the ’929 Patent, knowing
7 that such use of the Accused Instrumentalities with compatible systems will result in
8 infringement of the ’929 Patent. Accordingly, Barracuda has been (since at least as of
9 filing of the original complaint), and currently is, inducing infringement of the ‘929
10 Patent, in violation of 35 U.S.C. § 271(b).

11 13. Barracuda has also infringed, and continues to infringe, claims of the ‘929
12 patent by offering to commercially distribute, commercially distributing, making,
13 and/or importing the Accused Instrumentalities, which are used in practicing the
14 process, or using the systems, of the ‘929 patent, and constitute a material part of the
15 invention. Barracuda knows the components in the Accused Instrumentalities to be
16 especially made or especially adapted for use in infringement of the ‘929 patent, not a
17 staple article, and not a commodity of commerce suitable for substantial noninfringing
18 use. For example, the ordinary way of using the Accused Instrumentalities infringes the
19 patent claims, and as such, is especially adapted for use in infringement. Accordingly,
20 Barracuda has been, and currently is, contributorily infringing the ‘929 patent, in
21 violation of 35 U.S.C. § 271(c).

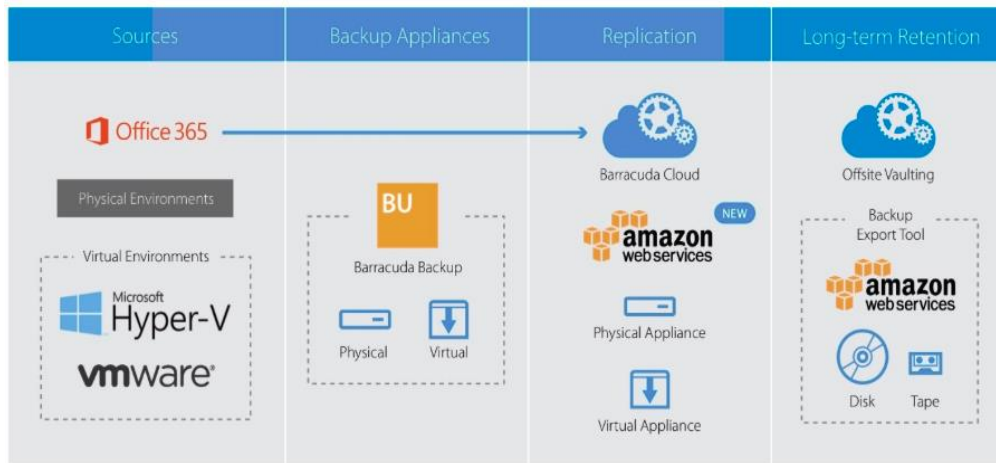
22 14. The Accused Instrumentalities include “[a] communication system
23 including a first apparatus having a first storage medium, and a second apparatus.” For
24 example, the Accused Instrumentalities include a communication system comprising
25 Barracuda Back up physical and virtual appliances, and replication zones including a
26 storage medium (*e.g.*, Barracuda Cloud, Amazon Web Services, or network drives) and
27 clients (*e.g.*, mobile devices, native desktop client, virtual desktop).
28 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.

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https://www.barracuda.com/resources/Barracuda_Backup_DS_US

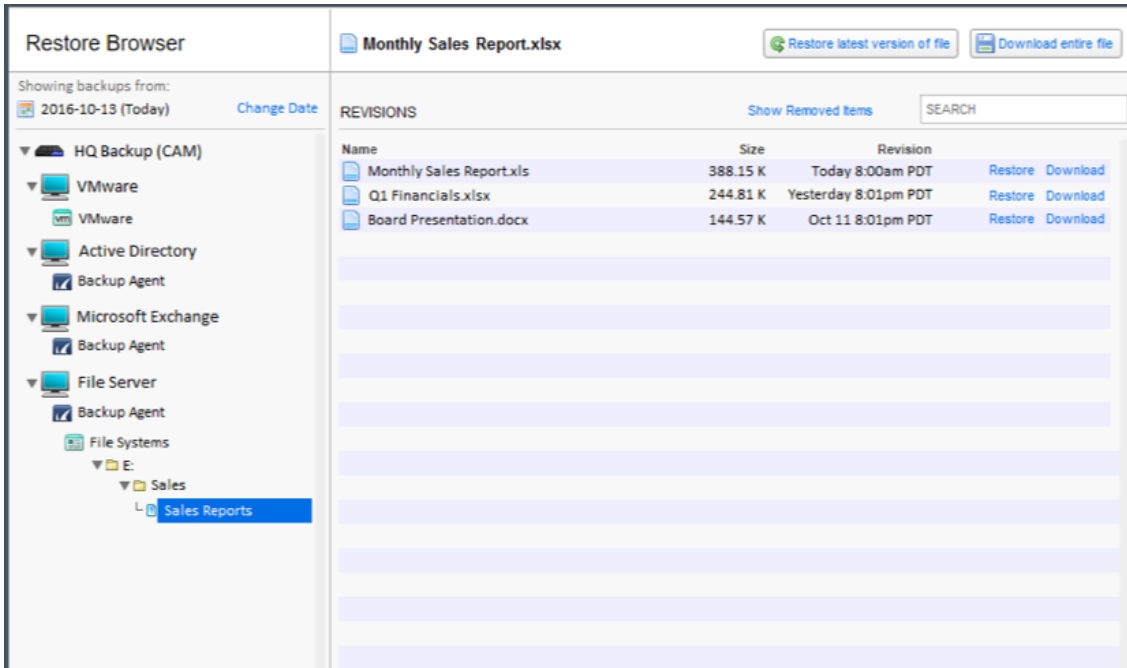
15. The Accused Instrumentalities include a second apparatus comprising: a second storage medium configured to store management information of data to be transferred to said first storage medium. For example, the Accused Instrumentalities include clients such as mobile devices, native desktop clients, or virtual desktops:



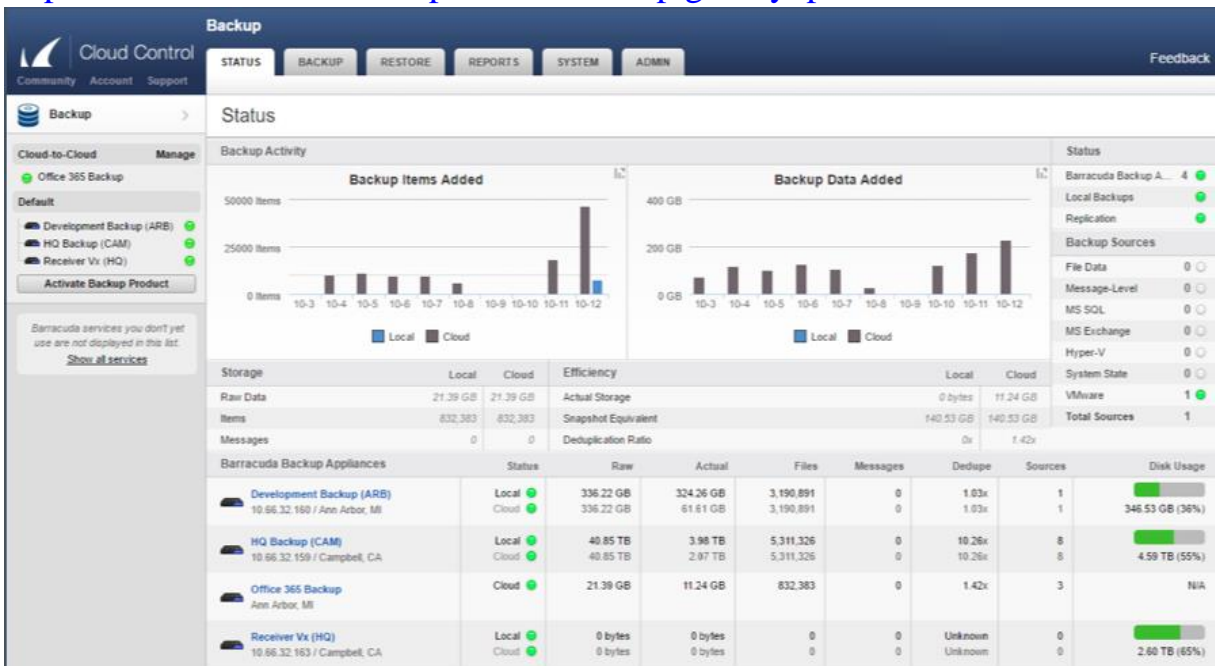
https://www.barracuda.com/resources/Barracuda_Backup_DS_US

Moreover, these clients include a storage medium (e.g., see figure below). Moreover, the Accused Instrumentalities provide a “BackUp Agent”) configured to synchronize selected folders to be backed up to the Barracuda Backup and/or Cloud:

<https://support.Barracuda.com/article/CTX207683?recommended>.



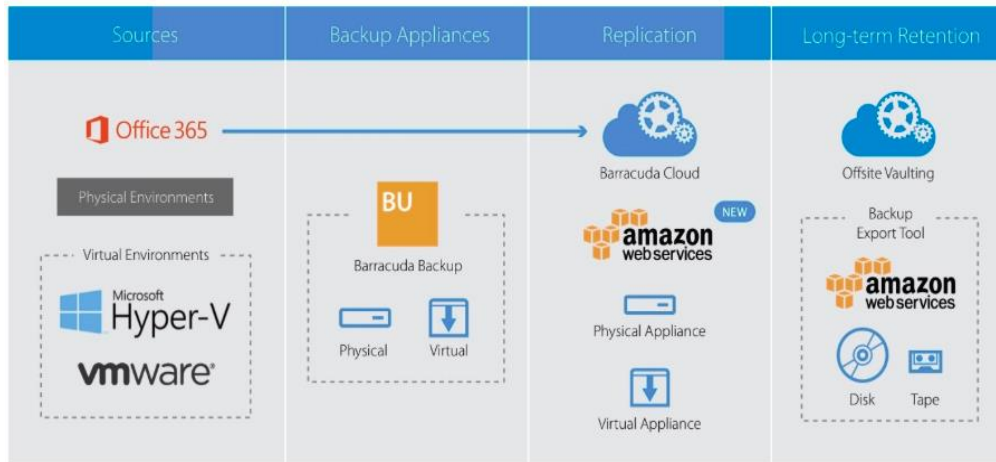
<https://www.barracuda.com/products/backup/gallery#paranav-navbar>



<https://www.barracuda.com/products/backup/gallery#paranav-navbar>

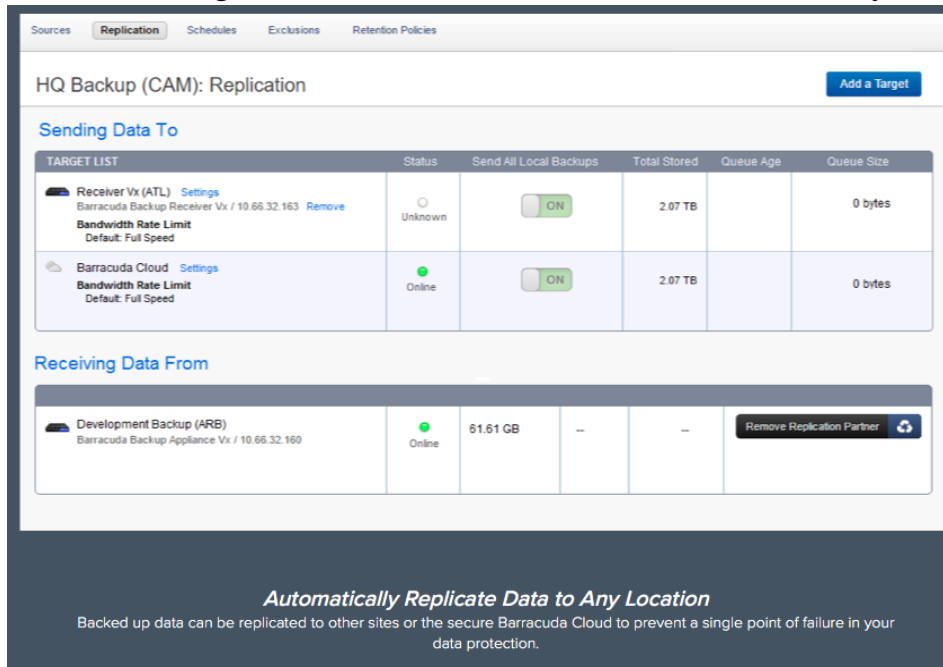
16. The Accused Instrumentalities include a second apparatus comprising “a communicator configured to communicate data with said first apparatus.” For example, the Accused Instrumentalities disclose “Barracuda Backup can replicate data securely from an on-premises physical or virtual backup appliance to Barracuda Cloud, a remote

1 physical appliance, a remote virtual appliance, or Amazon Web Services (AWS).
 2 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



11 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.

12 17. The Accused Instrumentalities further include a second apparatus
 13 comprising “a detector configured to detect whether said first apparatus and a second
 14 apparatus are connected.” For example, the Accused Instrumentalities include a
 15 detector configured to detect whether network connectivity is online:



27 <https://www.barracuda.com/products/backup/gallery#paranav-navbar>

The screenshot displays the Barracuda Backup web interface. At the top, there are navigation tabs for STATUS, BACKUP, RESTORE, REPORTS, SYSTEM, and ADMIN. The main content area is titled 'Status' and includes two bar charts: 'Backup Items Added' and 'Backup Data Added', both comparing Local and Cloud backup activity over time. Below the charts is a summary table for Storage and Efficiency. At the bottom, there is a table of 'Barracuda Backup Appliances' with columns for Name, Location, Status, Raw and Actual storage, Files, Messages, Dedupe, Sources, and Disk Usage.

| Storage | | Local | Cloud | Efficiency | |
|----------|----------|----------|----------|---------------------|-----------------------|
| Raw Data | 21.39 GB | 21.39 GB | 21.39 GB | Actual Storage | 0 bytes / 11.24 GB |
| Items | 832,383 | 832,383 | 832,383 | Snapshot Equivalent | 140.53 GB / 140.53 GB |
| Messages | 0 | 0 | 0 | Deduplication Ratio | 0x / 1.42x |

| Barracuda Backup Appliances | Status | Raw | Actual | Files | Messages | Dedupe | Sources | Disk Usage |
|--|----------------|------------------------|-----------------------|------------------------|----------|--------------------|---------|-----------------|
| Development Backup (ARB) 10.66.32.160 / Ann Arbor, MI | Local Cloud | 336.22 GB 336.22 GB | 324.26 GB 61.61 GB | 3,190,891 3,190,891 | 0 0 | 1.03x 1.03x | 1 1 | 346.53 GB (36%) |
| HQ Backup (CAM) 10.66.32.159 / Campbell, CA | Local Cloud | 40.85 TB 40.85 TB | 3.98 TB 2.97 TB | 5,311,326 5,311,326 | 0 0 | 10.26x 10.26x | 8 8 | 4.59 TB (55%) |
| Office 365 Backup Ann Arbor, MI | Cloud | 21.39 GB | 11.24 GB | 832,383 | 0 | 1.42x | 3 | N/A |
| Receiver Vx (HQ) 10.66.32.163 / Campbell, CA | Local Cloud | 0 bytes 0 bytes | 0 bytes 0 bytes | 0 0 | 0 0 | Unknown Unknown | 0 0 | 2.60 TB (65%) |

Protect Your Critical Data from a Single Pane of Glass
Barracuda Backup provides a simple web-based management tool for protecting your business data regardless of location and source.

<https://www.barracuda.com/products/backup/gallery#paranav-navbar>

18. The Accused Instrumentalities further include a second apparatus comprising “an editor configured to select certain data to be transferred and to edit said management information based on said selection without regard to the connection of said first apparatus.” For example, the Accused Instrumentalities let the user select folders or files to synchronize:

5. Restoring Files

5.1 Lab Instructions

In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and restore a deleted file.

Barracuda Backup Foundation -BU01 available at <https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831>. This selection can be done without regard to the connection status to the

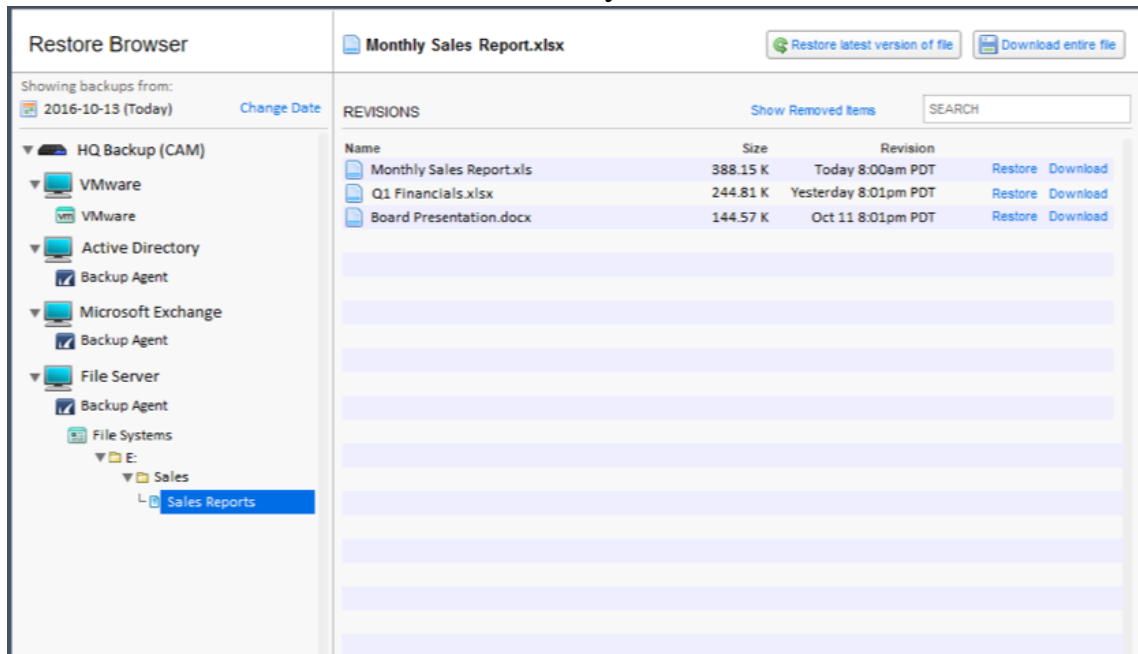
1 first apparatus in that the Accused Devices will make a local copy of the data to be
 2 transferred.

3 **How is the Barracuda Backup different than other product offerings?**

4 The Barracuda Backup creates a local copy of protected data and efficiently transfers the data offsite without additional burden
 5 to production servers. The offsite storage is monitored and managed by Barracuda Central as part of the monthly Barracuda
 6 Backup Subscription. With three secure copies of data and several different methods to restore an organization’s assets, the
 7 Barracuda Backup is a comprehensive, flexible and efficient solution to achieve your disaster recovery needs.

8 <https://www.barracuda.com/products/backup/faq>.

9 19. The Accused Instrumentalities further include a second apparatus
 10 comprising “a controller configured to control transfer of the selected data stored in said
 11 second apparatus to said first apparatus via said communicator based on said
 12 management information edited by said editor when said detector detects that said first
 13 apparatus and said second apparatus are connected.” For example, the Accused
 14 Instrumentalities let the user select folders to synchronize:



15 <https://www.barracuda.com/products/backup/gallery#paranav-navbar>

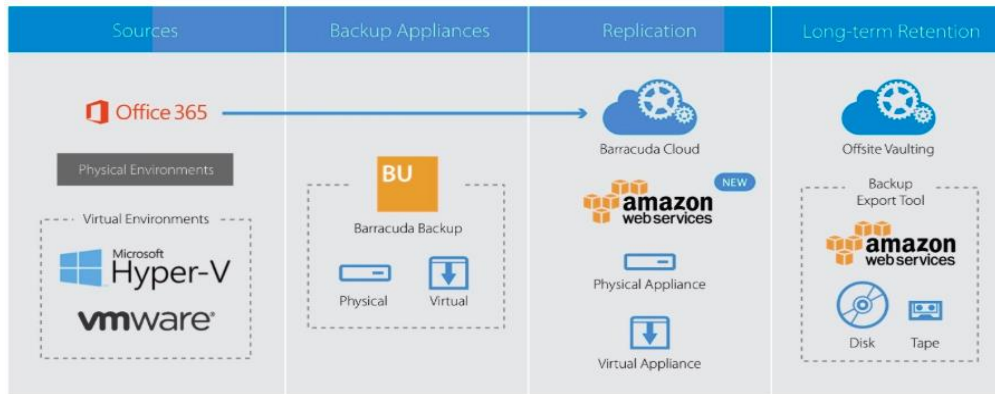
5. Restoring Files

5.1 Lab Instructions

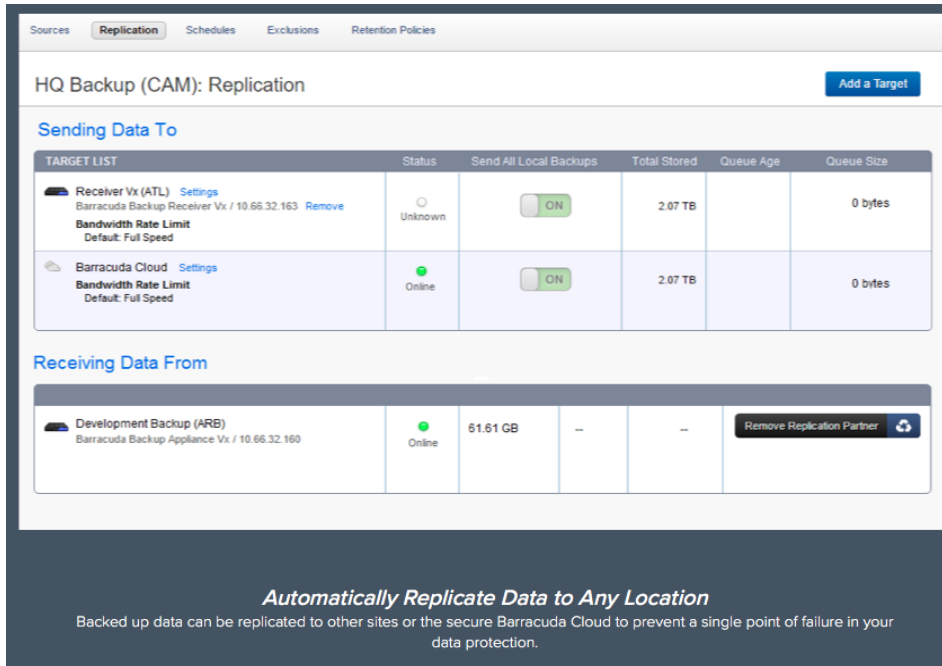
In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and restore a deleted file.

Barracuda Backup Foundation -BU01 available at <https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831>

As an example, the selected files are transferred to the first apparatus, *e.g.* Barracuda Cloud, Amazon Web Services, or other backup appliance, when the Accused Instrumentalities determine that they are connected:



https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



<https://www.barracuda.com/products/backup/gallery#paranav-navbar>

How is the Barracuda Backup different than other product offerings?

The Barracuda Backup creates a local copy of protected data and efficiently transfers the data offsite without additional burden to production servers. The offsite storage is monitored and managed by Barracuda Central as part of the monthly Barracuda Backup Subscription. With three secure copies of data and several different methods to restore an organization’s assets, the Barracuda Backup is a comprehensive, flexible and efficient solution to achieve your disaster recovery needs.

<https://www.barracuda.com/products/backup/faq>.

20. The Accused Instrumentalities further include a second apparatus “wherein said controller is configured to compare said management information edited by said editor with management information of data stored in said first storage medium and to transmit data in said second apparatus based on result of the comparison.” For example, the Accused Instrumentalities will apply deduplication to information to be transmitted to see if it has already been transmitted. For example, the client will perform deduplication and determine whether or not the data to be transferred is already on the back up appliance. Only information that has not already been sent to the Back Up appliance will be transmitted:

1 **BU** **Deduplication**

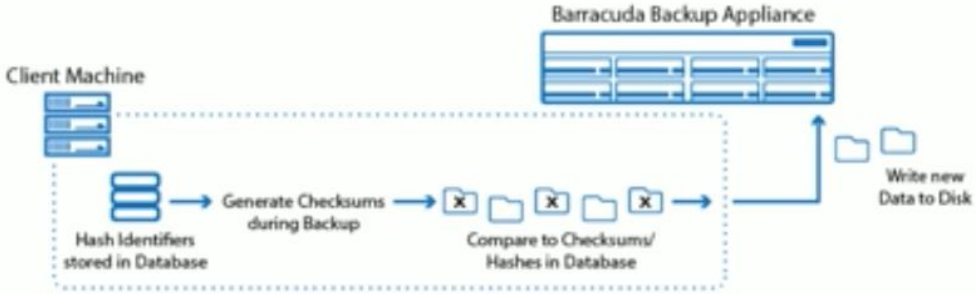
- 2
- 3 • **Three stage model**
 - 4 - Source Deduplication
 - 5 - Target Deduplication
 - 6 - Global Deduplication
- 7 • **Requires Barracuda Backup Agent installation on each Windows or Linux client**
- 8
- 9 • **Optimizes capacity usage**
- 10 • **Minimizes bandwidth**
- 11

12

13 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

15 **BU** **Inline Deduplication**

- 16
- 17 • **File is logically divided into small data chunks**
- 18 • **Each chunk is assigned a unique hash (digital fingerprint)**
 - 19 - MD5 and SHA1 checksums
- 20



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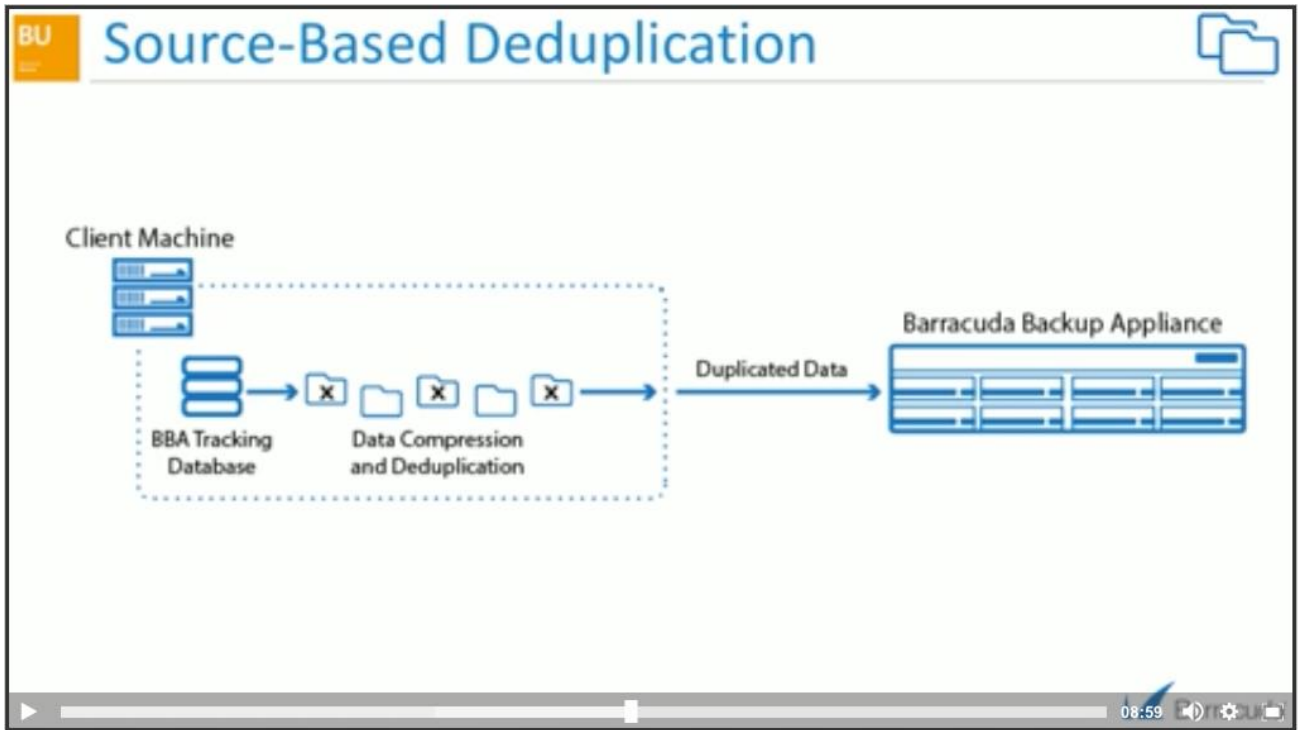
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26

The diagram illustrates the inline deduplication process. On the left, a 'Client Machine' is shown. A dashed box encloses the client-side operations: 'Hash Identifiers stored in Database' leads to 'Generate Checksums during Backup', which then leads to 'Compare to Checksums/Hashes in Database'. This comparison step results in three folders, each marked with an 'X', indicating deduplicated data. An arrow points from these deduplicated folders to the 'Barracuda Backup Appliance' on the right. From the appliance, an arrow points to 'Write new Data to Disk', showing a folder icon.

27 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>.



<https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

Likewise, the Accused Instrumentalities can monitor each file that has been backed up and determine when it was last revised:

Restore Browser

Showing backups from: 2016-10-13 (Today) [Change Date](#)

Monthly Sales Report.xlsx [Restore latest version of file](#) [Download entire file](#)

REVISIONS [Show Removed Items](#)

| Name | Size | Revision | Restore | Download |
|--------------------------|----------|----------------------|-------------------------|--------------------------|
| Monthly Sales Report.xls | 388.15 K | Today 8:00am PDT | Restore | Download |
| Q1 Financials.xlsx | 244.81 K | Yesterday 8:01pm PDT | Restore | Download |
| Board Presentation.docx | 144.57 K | Oct 11 8:01pm PDT | Restore | Download |

Navigation tree:

- HQ Backup (CAM)
 - VMware
 - VMware
 - Active Directory
 - Backup Agent
 - Microsoft Exchange
 - Backup Agent
 - File Server
 - Backup Agent
 - File Systems
 - E:
 - Sales
 - Sales Reports

1 <https://www.barracuda.com/products/backup/gallery>

2 21. Barracuda also infringes other claims of the '929 Patent, directly and
3 through inducing infringement and contributory infringement.

4 22. By making, using, offering for sale, selling and/or importing into the
5 United States the Accused Instrumentalities, and touting the benefits of using the
6 Accused Instrumentalities' accused features, Barracuda has injured Data Scape and is
7 liable to Data Scape for infringement of the '929 Patent pursuant to 35 U.S.C. § 271.

8 23. As a result of Barracuda's infringement of the '929 Patent, Plaintiff Data
9 Scape is entitled to monetary damages in an amount adequate to compensate for
10 Barracuda's infringement, but in no event less than a reasonable royalty for the use
11 made of the invention by Barracuda, together with interest and costs as fixed by the
12 Court.

13 **COUNT II**

14 **INFRINGEMENT OF U.S. PATENT NO. 8,386,581**

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

17 25. Data Scape is the owner by assignment of United States Patent No.
18 8,386,581 ("the '581 Patent") entitled "Communication System And Its Method and
19 Communication Apparatus And Its Method." The '581 Patent was duly and legally
20 issued by the United States Patent and Trademark Office on Feb. 26, 2013. A true and
21 correct copy of the '581 Patent is included as Exhibit C.

22 26. On information and belief, Barracuda has offered for sale, sold and/or
23 imported into the United States Barracuda products and services that infringe the '581
24 patent, and continues to do so. By way of illustrative example, these infringing products
25 and services include, without limitation, Barracuda's products and services, *e.g.*,
26 Barracuda Backup Physical Appliance Models 190, 295, 290,390, 490, 690, 790, 890,
27 895, 990, 995, 1090, 6090, 8090, 9090, 10090, Barracuda Backup Virtual Appliances,
28

1 Barracuda Cloud, and all versions and variations thereof since the issuance of the ‘581
2 Patent (“Accused Instrumentalities”).

3 27. On information and belief, Barracuda has directly infringed and continues
4 to infringe the ‘581 Patent, for example, by making, selling, offering for sale, and/or
5 importing the Accused Instrumentalities, and through its own use and testing of the
6 Accused Instrumentalities, which constitute communication apparatus of Claim 1 of the
7 ‘581 Patent comprising: a storage unit configured to store content data to a storage
8 medium; a communication unit configured to communicate with an external apparatus;
9 a controller configured to edit a list so that content data is registered in the list, to
10 uniquely associate the list with the external apparatus using a unique identification of
11 the external apparatus, to extract the list associated with the external apparatus from a
12 plurality of lists in the communication apparatus when the external apparatus is
13 connected to the communication apparatus, and to control transferring of content data
14 registered in the extracted list to the external apparatus. Upon information and belief,
15 Barracuda uses the Accused Instrumentalities, which are infringing systems, for its own
16 internal non-testing business purposes, while testing the Accused Instrumentalities, and
17 while providing technical support and repair services for the Accused Instrumentalities
18 to Barracuda’s customers.

19 28. On information and belief, Barracuda has had knowledge of the ‘581
20 Patent since at least the filing of the original Complaint in this action, or shortly
21 thereafter, and on information and belief, Barracuda knew of the ‘581 Patent and knew
22 of its infringement, including by way of this lawsuit. By the time of trial, Barracuda will
23 have known and intended (since receiving such notice) that their continued actions
24 would actively induce and contribute to the infringement of the claims of the ‘581
25 Patent.

26 29. On information and belief, use of the Accused Instrumentalities in their
27 ordinary and customary fashion results in infringement of the claims of the ‘581 Patent.
28

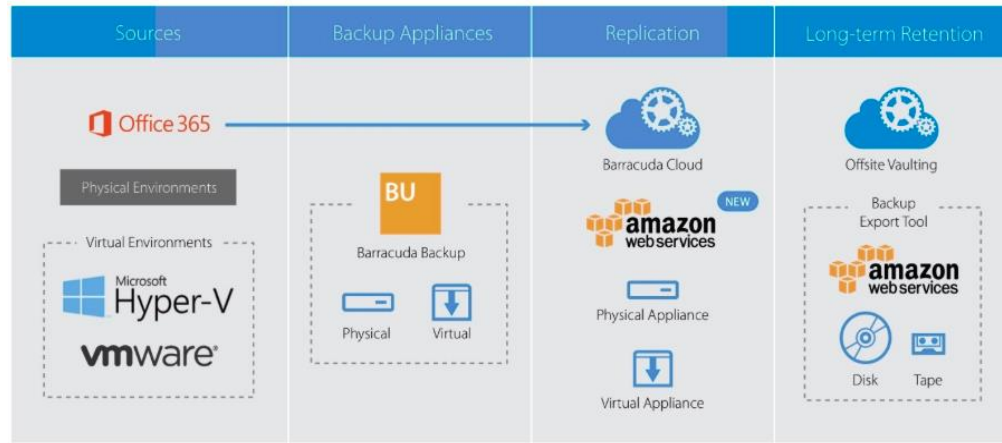
1 30. Barracuda’s affirmative acts of making, using, selling, offering for sale,
2 and/or importing the Accused Instrumentalities have induced and continue to induce
3 users of the Accused Instrumentalities to use the Accused Instrumentalities in their
4 normal and customary way to infringe the claims of the ‘581 Patent, knowing that when
5 the Accused Instrumentalities are used in their ordinary and customary manner, such
6 systems constitute infringing communication systems comprising: a storage unit
7 configured to store content data to a storage medium; a communication unit configured
8 to communicate with an external apparatus; a controller configured to edit a list so that
9 content data is registered in the list, to uniquely associate the list with the external
10 apparatus using a unique identification of the external apparatus, to extract the list
11 associated with the external apparatus from a plurality of lists in the communication
12 apparatus when the external apparatus is connected to the communication apparatus,
13 and to control transferring of content data registered in the extracted list to the external
14 apparatus. For example, Barracuda explains to customers the benefits of using the
15 Accused Instrumentalities, such as by touting their advantages: “Barracuda Backup
16 enables business to run seamlessly by minimizing downtime and preventing data loss,
17 providing the industry’s easiest to deploy and manage all-in-one data protection
18 solution.” https://www.barracuda.com/resources/Barracuda_Backup_DS_US.
19 Barracuda further notes that “Barracuda Backup lets you protect against local disasters
20 and data loss by using the cloud to simply and cost-effectively get data off-site. It lets
21 you securely and efficiently replicate data to the Barracuda Cloud, a remote physical
22 backup appliance, a remote virtual backup appliance, or AWS for off-site protection.”
23 <https://www.barracuda.com/products/backup>. Barracuda also induces its customers to
24 use the Accused Instrumentalities to infringe other claims of the ‘581 Patent. Barracuda
25 specifically intended and was aware that the normal and customary use of the Accused
26 Instrumentalities on compatible systems would infringe the ‘581 Patent. Barracuda
27 performed the acts that constitute induced infringement, and would induce actual
28 infringement, with the knowledge of the ‘581 Patent and with the knowledge, or willful

1 blindness to the probability, that the induced acts would constitute infringement. On
2 information and belief, Barracuda engaged in such inducement to promote the sales of
3 the Accused Instrumentalities, *e.g.*, through Barracuda’s user manuals, product support,
4 marketing materials, demonstrations, installation support, and training materials to
5 actively induce the users of the accused products to infringe the ‘581 Patent.
6 Accordingly, Barracuda as induced and continues to induce end users of the accused
7 products to use the accused products in their ordinary and customary way with
8 compatible systems to make and/or use systems infringing the ‘581 Patent, knowing
9 that such use of the Accused Instrumentalities with compatible systems will result in
10 infringement of the ‘581 Patent. Accordingly, Barracuda has been (since at least as of
11 filing of the original complaint), and currently is, inducing infringement of the ‘581
12 Patent, in violation of 35 U.S.C. § 271(b).

13 31. Barracuda has also infringed, and continues to infringe, claims of the ‘581
14 patent by offering to commercially distribute, commercially distributing, making,
15 and/or importing the Accused Instrumentalities, which are used in practicing the
16 process, or using the systems, of the ‘581 patent, and constitute a material part of the
17 invention. Barracuda knows the components in the Accused Instrumentalities to be
18 especially made or especially adapted for use in infringement of the ‘581 patent, not a
19 staple article, and not a commodity of commerce suitable for substantial noninfringing
20 use. For example, the ordinary way of using the Accused Instrumentalities infringes the
21 patent claims, and as such, is especially adapted for use in infringement. Accordingly,
22 Barracuda has been, and currently is, contributorily infringing the ‘581 patent, in
23 violation of 35 U.S.C. § 271(c).

24 32. The Accused Instrumentalities include “[a] communication apparatus
25 comprising: a storage unit configured to store content data to a storage medium.” For
26 example, the Accused Instrumentalities include a communication apparatus comprising
27 Barracuda Back up physical and virtual appliances, and replication zones including a
28 storage medium (*e.g.*, Barracuda Cloud, Amazon Web Services, or network drives) and

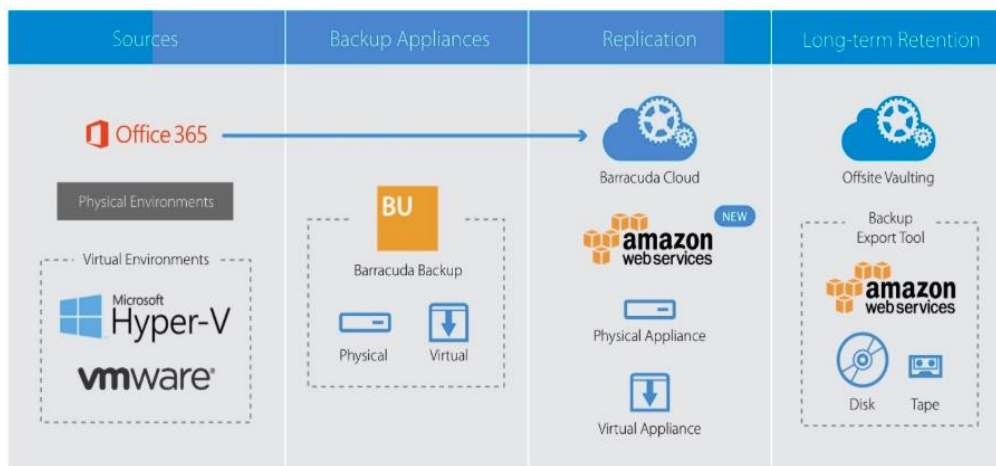
1 clients (e.g., mobile devices, native desktop client, virtual desktop) which include
 2 storage media. https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



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10 https://www.barracuda.com/resources/Barracuda_Backup_DS_US

11 33. The Accused Instrumentalities include “a communication unit configured
 12 to communicate with an external apparatus.” For example, the Accused
 13 Instrumentalities disclose “Barracuda Backup can replicate data securely from an on-
 14 premises physical or virtual backup appliance to Barracuda Cloud, a remote physical
 15 appliance, a remote virtual appliance, or Amazon Web Services (AWS).

16 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



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24
25 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.

26 15. The Accused Instrumentalities further include “a controller configured to
 27 edit a list so that content data is registered in the list.” For example, the Accused

In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and restore a deleted file.

Barracuda Backup Foundation -BU01 available at <https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831>.

34. The Accused Instrumentalities further include “a controller configured to uniquely associate the list with the external apparatus using a unique identification of the external apparatus.” For example, the Accused Instrumentalities include a unique icon and name for every storage medium for every storage medium that is being backed up and for each backup storage medium:

The screenshot shows the 'Replication' tab in the Barracuda Backup interface. The main heading is 'HQ Backup (CAM): Replication' with an 'Add a Target' button. Below this is a section titled 'Sending Data To' which contains a table of replication targets.

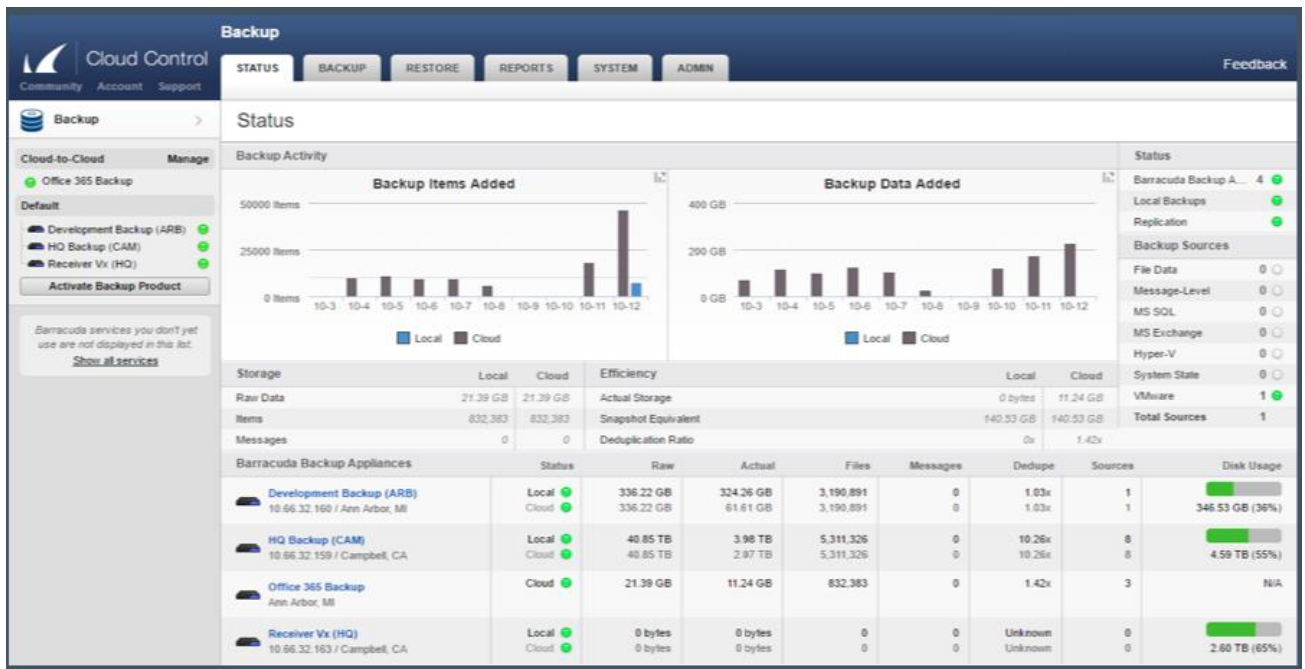
| TARGET LIST | Status | Send All Local Backups | Total Stored | Queue Age | Queue Size |
|---|---------|-------------------------------------|--------------|-----------|------------|
| Receiver Vx (ATL) Settings Barracuda Backup Receiver Vx / 10.66.32.163 Remove Bandwidth Rate Limit Default: Full Speed | Unknown | <input checked="" type="checkbox"/> | 2.07 TB | | 0 bytes |
| Barracuda Cloud Settings Bandwidth Rate Limit Default: Full Speed | Online | <input checked="" type="checkbox"/> | 2.07 TB | | 0 bytes |

Below the 'Sending Data To' section is a section titled 'Receiving Data From' which contains a table of replication partners.

| | | | | | |
|--|--------|----------|----|----|--|
| Development Backup (ARB) Barracuda Backup Appliance Vx / 10.66.32.160 | Online | 61.61 GB | -- | -- | Remove Replication Partner |
|--|--------|----------|----|----|--|

At the bottom of the interface, there is a dark blue banner with the text: *Automatically Replicate Data to Any Location*. Below this, it states: 'Backed up data can be replicated to other sites or the secure Barracuda Cloud to prevent a single point of failure in your data protection.'

<https://www.barracuda.com/products/backup/gallery>



<https://www.barracuda.com/products/backup/gallery>.

35. The Accused Instrumentalities further include “a controller configured to control transferring of content data registered in the extracted list to the external apparatus.” For example, the Accused Instrumentalities control the transfer of content selected by the user to the backup location:

5. Restoring Files

5.1 Lab Instructions

In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and restore a deleted file.

Barracuda Backup Foundation -BU01 available at

<https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831>. As another example the Accused Instrumentalities monitor and control the transfer of data from the client device (including the information selected by the user) to the backup storage:

Sources **Replication** Schedules Exclusions Retention Policies

HQ Backup (CAM): Replication Add a Target

Sending Data To

| TARGET LIST | Status | Send All Local Backups | Total Stored | Queue Age | Queue Size |
|--|---------|-------------------------------------|--------------|-----------|------------|
| Receiver Vx (ATL) Settings Barracuda Backup Receiver Vx / 10.66.32.163 Remove Bandwidth Rate Limit Default: Full Speed | Unknown | <input checked="" type="checkbox"/> | 2.07 TB | | 0 bytes |
| Barracuda Cloud Settings Bandwidth Rate Limit Default: Full Speed | Online | <input checked="" type="checkbox"/> | 2.07 TB | | 0 bytes |

Receiving Data From

| | | | | | |
|--|--------|----------|----|----|--|
| Development Backup (ARB) Barracuda Backup Appliance Vx / 10.66.32.160 | Online | 61.61 GB | -- | -- | Remove Replication Partner |
|--|--------|----------|----|----|--|

Automatically Replicate Data to Any Location
 Backed up data can be replicated to other sites or the secure Barracuda Cloud to prevent a single point of failure in your data protection.

<https://www.barracuda.com/products/backup/gallery>

Cloud Control Backup

STATUS BACKUP RESTORE REPORTS SYSTEM ADMIN Feedback

Status

Backup Activity

Backup Items Added

Backup Data Added

Status

- Barracuda Backup A... 4 ●
- Local Backups ●
- Replication ●

Backup Sources

- File Data 0 ○
- Message-Level 0 ○
- MS SQL 0 ○
- MS Exchange 0 ○
- Hyper-V 0 ○
- System State 0 ○
- VMware 1 ●
- Total Sources 1

| | Storage | | Efficiency | | Local | | Cloud | | Sources | Disk Usage |
|----------|----------|----------|---------------------|----------------|-----------|-----------|---------|-----------|---------|-----------------|
| | Local | Cloud | Raw Data | Actual Storage | Local | Cloud | Local | Cloud | | |
| Raw Data | 21.39 GB | 21.39 GB | 336.22 GB | 324.26 GB | 0 bytes | 11.24 GB | 0 bytes | 11.24 GB | 1 | |
| Items | 832,383 | 832,383 | 336.22 GB | 61.61 GB | 140.53 GB | 140.53 GB | 0 bytes | 140.53 GB | 1 | 346.53 GB (36%) |
| Messages | 0 | 0 | Snapshot Equivalent | | 0x | 1.42x | | | 3 | N/A |
| | | | Deduplication Ratio | | 0x | 1.42x | | | 0 | 2.60 TB (85%) |

| Barracuda Backup Appliances | Status | Raw | Actual | Files | Messages | Dedupe | Sources | Disk Usage |
|--|--|-----------|-----------|-----------|----------|---------|---------|---------------|
| Development Backup (ARB) 10.66.32.160 / Ann Arbor, MI | Local ● | 336.22 GB | 324.26 GB | 3,190,891 | 0 | 1.03x | 1 | |
| HQ Backup (CAM) 10.66.32.159 / Campbell, CA | Local ● | 40.85 TB | 3.98 TB | 5,311,326 | 0 | 10.26x | 8 | 4.59 TB (55%) |
| Office 365 Backup Ann Arbor, MI | Cloud ● | 21.39 GB | 11.24 GB | 832,383 | 0 | 1.42x | 3 | N/A |
| Receiver Vx (HQ) 10.66.32.163 / Campbell, CA | Local ● | 0 bytes | 0 bytes | 0 | 0 | Unknown | 0 | |
| | Cloud ● | 0 bytes | 0 bytes | 0 | 0 | Unknown | 0 | 2.60 TB (85%) |

<https://www.barracuda.com/products/backup/gallery>

1 42. On information and belief, Barracuda has directly infringed and continues
2 to infringe the ‘751 Patent, for example, by making, selling, offering for sale, and/or
3 importing the Accused Instrumentalities, and through its own use and testing of the
4 Accused Instrumentalities, which constitute a communication apparatus of Claim 1 of
5 the ‘751 Patent configured to transmit data to an apparatus comprising: a hardware
6 storage medium configured to store management information of data to be transferred
7 to the apparatus; a communicator configured to communicate data with the apparatus;
8 a detector configured to detect whether the communication apparatus and the apparatus
9 are connected; an editor configured to select certain data to be transferred and to edit
10 the management information based on the selection without regard to the connection of
11 the communication apparatus and the apparatus; and a controller configured to control
12 transfer of the selected data stored in the communication apparatus to the apparatus via
13 the communicator based on the management information edited by the editor when the
14 detector detects that the communication apparatus and the apparatus are connected,
15 wherein the controller is configured to compare the management information edited by
16 the editor with management information of data stored in the apparatus, determine a
17 size of the selected data in the communication apparatus, and transmit data in the
18 communication apparatus based on result of the comparison and the determination.
19 Upon information and belief, Barracuda uses the Accused Instrumentalities, which are
20 infringing systems, for its own internal non-testing business purposes, while testing the
21 Accused Instrumentalities, and while providing technical support and repair services
22 for the Accused Instrumentalities to Barracuda’s customers.

23 43. On information and belief, Barracuda has had knowledge of the ‘751
24 Patent since at least the filing of the original Complaint in this action, or shortly
25 thereafter, and on information and belief, Barracuda knew of the ‘751 Patent and knew
26 of its infringement, including by way of this lawsuit. By the time of trial, Barracuda will
27 have known and intended (since receiving such notice) that their continued actions
28

1 would actively induce and contribute to the infringement of the claims of the ‘751
2 Patent.

3 44. On information and belief, use of the Accused Instrumentalities in their
4 ordinary and customary fashion results in infringement of the claims of the ‘751 Patent.

5 45. Barracuda’s affirmative acts of making, using, selling, offering for sale,
6 and/or importing the Accused Instrumentalities have induced and continue to induce
7 users of the Accused Instrumentalities to use the Accused Instrumentalities in their
8 normal and customary way to infringe the claims of the ‘751 Patent, knowing that when
9 the Accused Instrumentalities are used in their ordinary and customary manner, such
10 systems constitute infringing communication systems comprising: a hardware storage
11 medium configured to store management information of data to be transferred to the
12 apparatus; a communicator configured to communicate data with the apparatus; a
13 detector configured to detect whether the communication apparatus and the apparatus
14 are connected; an editor configured to select certain data to be transferred and to edit
15 the management information based on the selection without regard to the connection of
16 the communication apparatus and the apparatus; and a controller configured to control
17 transfer of the selected data stored in the communication apparatus to the apparatus via
18 the communicator based on the management information edited by the editor when the
19 detector detects that the communication apparatus and the apparatus are connected,
20 wherein the controller is configured to compare the management information edited by
21 the editor with management information of data stored in the apparatus, determine a
22 size of the selected data in the communication apparatus, and transmit data in the
23 communication apparatus based on result of the comparison and the determination. For
24 example, Barracuda explains to customers the benefits of using the Accused
25 Instrumentalities, such as by touting their advantages: “Barracuda Backup enables
26 business to run seamlessly by minimizing downtime and preventing data loss, providing
27 the industry’s easiest to deploy and manage all-in-one data protection solution.”
28 https://www.barracuda.com/resources/Barracuda_Backup_DS_US. Barracuda further

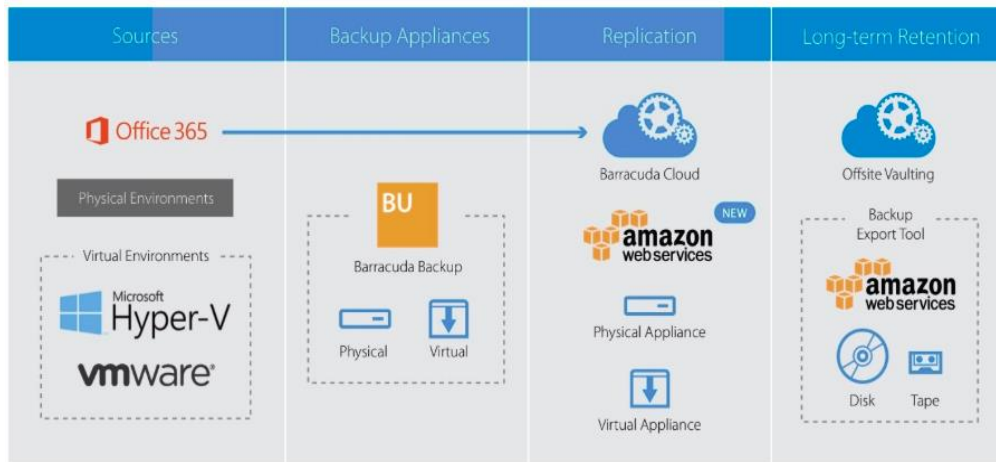
1 notes that “Barracuda Backup lets you protect against local disasters and data loss by
2 using the cloud to simply and cost-effectively get data off-site. It lets you securely and
3 efficiently replicate data to the Barracuda Cloud, a remote physical backup appliance,
4 a remote virtual backup appliance, or AWS for off-site protection.”
5 <https://www.barracuda.com/products/backup>. Barracuda also induces its customers to
6 use the Accused Instrumentalities to infringe other claims of the ‘751 Patent. Barracuda
7 specifically intended and was aware that the normal and customary use of the Accused
8 Instrumentalities on compatible systems would infringe the ‘751 Patent. Barracuda
9 performed the acts that constitute induced infringement, and would induce actual
10 infringement, with the knowledge of the ‘751 Patent and with the knowledge, or willful
11 blindness to the probability, that the induced acts would constitute infringement. On
12 information and belief, Barracuda engaged in such inducement to promote the sales of
13 the Accused Instrumentalities, *e.g.*, through Barracuda’s user manuals, product support,
14 marketing materials, demonstrations, installation support, and training materials to
15 actively induce the users of the accused products to infringe the ‘751 Patent.
16 Accordingly, Barracuda has induced and continues to induce end users of the accused
17 products to use the accused products in their ordinary and customary way with
18 compatible systems to make and/or use systems infringing the ‘751 Patent, knowing
19 that such use of the Accused Instrumentalities with compatible systems will result in
20 infringement of the ‘751 Patent. Accordingly, Barracuda has been (since at least as of
21 filing of the original complaint), and currently is, inducing infringement of the ‘751
22 Patent, in violation of 35 U.S.C. § 271(b).

23 46. Barracuda has also infringed, and continues to infringe, claims of the ‘751
24 patent by offering to commercially distribute, commercially distributing, making,
25 and/or importing the Accused Instrumentalities, which are used in practicing the
26 process, or using the systems, of the ‘751 patent, and constitute a material part of the
27 invention. Barracuda knows the components in the Accused Instrumentalities to be
28 especially made or especially adapted for use in infringement of the ‘751 patent, not a

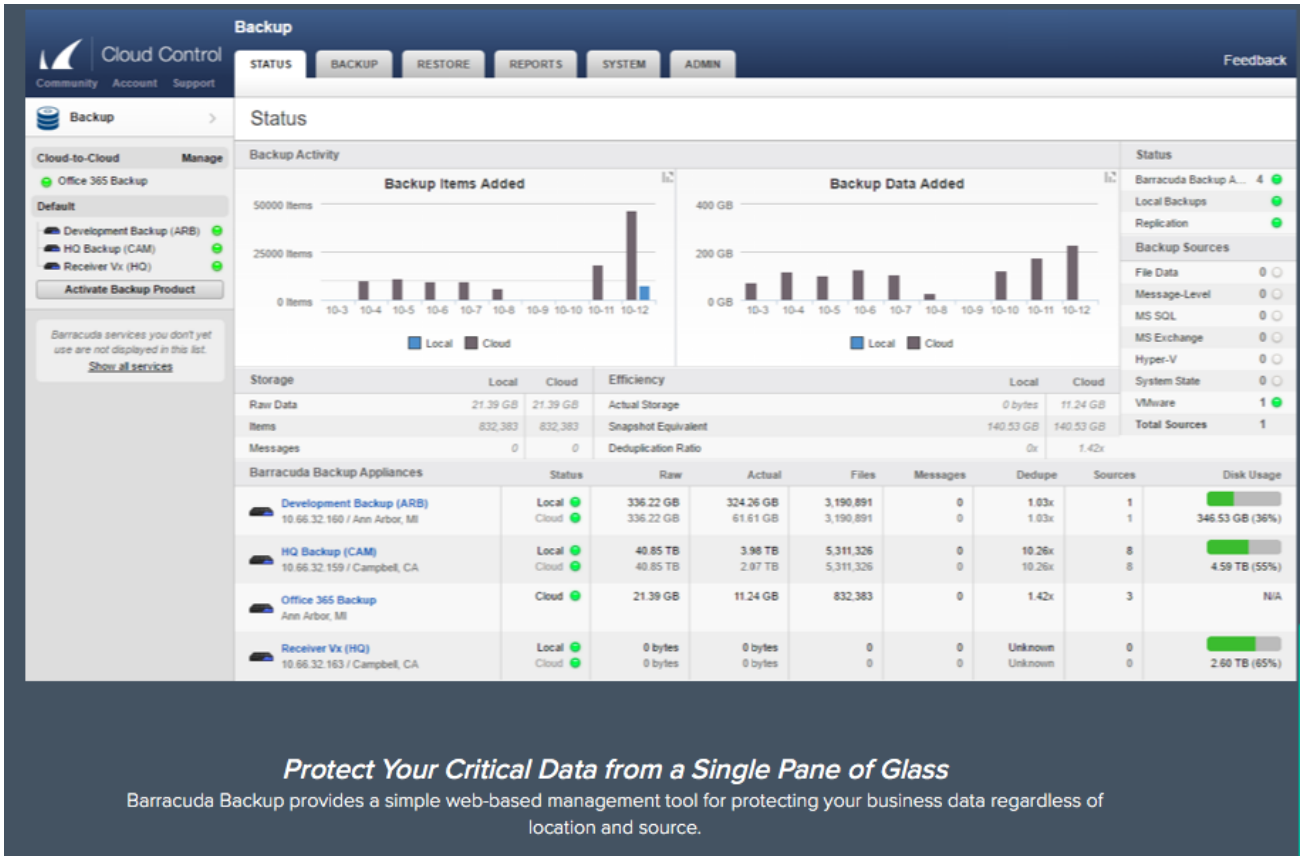
1 staple article, and not a commodity of commerce suitable for substantial noninfringing
 2 use. For example, the ordinary way of using the Accused Instrumentalities infringes the
 3 patent claims, and as such, is especially adapted for use in infringement. Accordingly,
 4 Barracuda has been, and currently is, contributorily infringing the ‘751 patent, in
 5 violation of 35 U.S.C. § 271(c).

6 47. The Accused Instrumentalities include “[a] communication apparatus
 7 configured to transmit data to an apparatus, the communication apparatus comprising:
 8 a hardware storage medium configured to store management information of data to be
 9 transferred to the apparatus.” For example, the Accused Instrumentalities disclose
 10 “Barracuda Backup can replicate data securely from an on-premises physical or virtual
 11 backup appliance to Barracuda Cloud, a remote physical appliance, a remote virtual
 12 appliance, or Amazon Web Services (AWS).

13 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



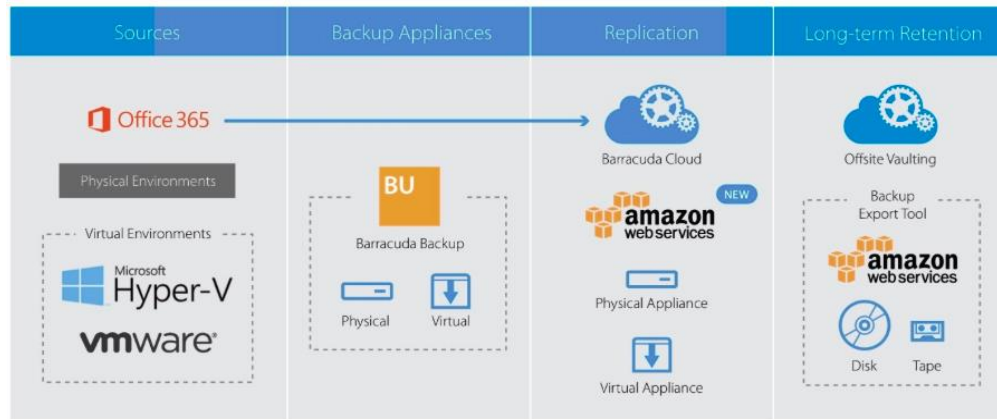
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22 https://www.barracuda.com/resources/Barracuda_Backup_DS_US. As a further
 23 example, the Accused Instrumentalities are designed to continuously monitor and
 24 control the data being transmitted:



<https://www.barracuda.com/products/backup/gallery#paranav-navbar>

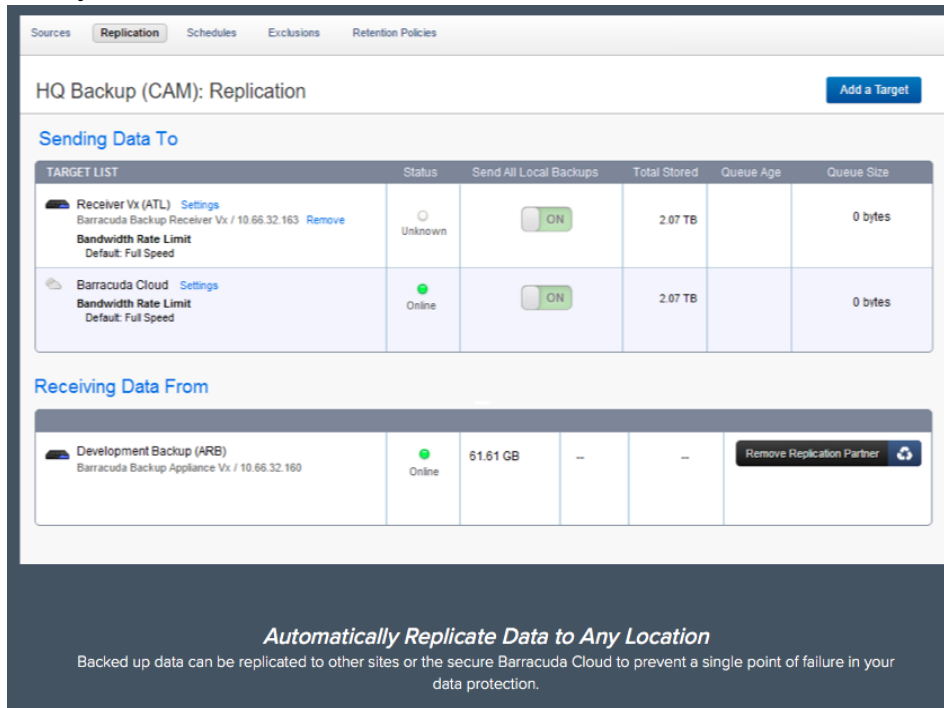
48. The Accused Instrumentalities include “a communicator configured to communicate data with the apparatus.” For example, the Accused Instrumentalities disclose “Barracuda Backup can replicate data securely from an on-premises physical or virtual backup appliance to Barracuda Cloud, a remote physical appliance, a remote virtual appliance, or Amazon Web Services (AWS).

https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



1 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.

2 49. The Accused Instrumentalities include “a detector configured to detect
 3 whether the communication apparatus and the apparatus are connected.” For example,
 4 the Accused Instrumentalities include a detector configured to detect whether network
 5 connectivity is down:



17 <https://www.barracuda.com/products/backup/gallery#paranav-navbar>.

18 50. The Accused Instrumentalities include “an editor configured to select
 19 certain data to be transferred and to edit the management information based on the
 20 selection without regard to the connection of the communication apparatus and the
 21 apparatus.” For example, the Accused Instrumentalities let the user select folders or
 22 files to synchronize:

23 5. Restoring Files

24 5.1 Lab Instructions

25 In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and
 26 restore a deleted file.

1 Barracuda Backup Foundation -BU01 available at
2 [https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-](https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831)
3 [guide/?fc=831](https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831). This selection can be done without regard to the connection status to the
4 communication apparatus and the apparatus in that the Accused Devices will make a
5 local copy of the data to be transferred.

6 **How is the Barracuda Backup different than other product offerings?**

7 The Barracuda Backup creates a local copy of protected data and efficiently transfers the data offsite without additional burden
8 to production servers. The offsite storage is monitored and managed by Barracuda Central as part of the monthly Barracuda
9 Backup Subscription. With three secure copies of data and several different methods to restore an organization's assets, the
10 Barracuda Backup is a comprehensive, flexible and efficient solution to achieve your disaster recovery needs.

11 <https://www.barracuda.com/products/backup/faq>.

12 51. The Accused Instrumentalities includes “a controller configured to control
13 transfer of the selected data stored in the communication apparatus to the apparatus via
14 the communicator based on the management information edited by the editor when the
15 detector detects that the communication apparatus and the apparatus are connected.”
16 For example, the Accused Instrumentalities let the user select folders or files to
17 synchronize:

18 **5. Restoring Files**

19 **5.1 Lab Instructions**

20 In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and
21 restore a deleted file.

22 Furthermore, the Accused Instrumentalities continuously monitors and controls transfer
23 of the selected data to the backup apparatus:
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HQ Backup (CAM): Replication Add a Target

Sending Data To

| TARGET LIST | Status | Send All Local Backups | Total Stored | Queue Age | Queue Size |
|---|---------|-------------------------------------|--------------|-----------|------------|
| Receiver Vx (ATL) Settings Barracuda Backup Receiver Vx / 10.66.32.163 Remove Bandwidth Rate Limit Default: Full Speed | Unknown | <input checked="" type="checkbox"/> | 2.07 TB | | 0 bytes |
| Barracuda Cloud Settings Barracuda Backup Receiver Vx / 10.66.32.163 Remove Bandwidth Rate Limit Default: Full Speed | Online | <input checked="" type="checkbox"/> | 2.07 TB | | 0 bytes |

Receiving Data From

| | | | | | |
|---|--------|----------|----|----|--|
| Development Backup (ARB) Barracuda Backup Appliance Vx / 10.66.32.160 | Online | 61.61 GB | -- | -- | Remove Replication Partner |
|---|--------|----------|----|----|--|

Automatically Replicate Data to Any Location

Backed up data can be replicated to other sites or the secure Barracuda Cloud to prevent a single point of failure in your data protection.

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11
12 <https://www.barracuda.com/products/backup/gallery#paranav-navbar>

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Cloud Control Backup Feedback

Community Account Support

STATUS BACKUP RESTORE REPORTS SYSTEM ADMIN

Status

Backup Activity

Backup Items Added

Bar chart showing items added over time (10-3 to 10-12). Legend: Local (blue), Cloud (grey).

Backup Data Added

Bar chart showing data added over time (10-3 to 10-12). Legend: Local (blue), Cloud (grey).

| Storage | Local | Cloud | Efficiency | Local | Cloud |
|----------|----------|----------|---------------------|-----------|-----------|
| Raw Data | 21.39 GB | 21.39 GB | Actual Storage | 0 bytes | 11.24 GB |
| Items | 832,383 | 832,383 | Snapshot Equivalent | 140.53 GB | 140.53 GB |
| Messages | 0 | 0 | Deduplication Ratio | 0x | 1.42x |

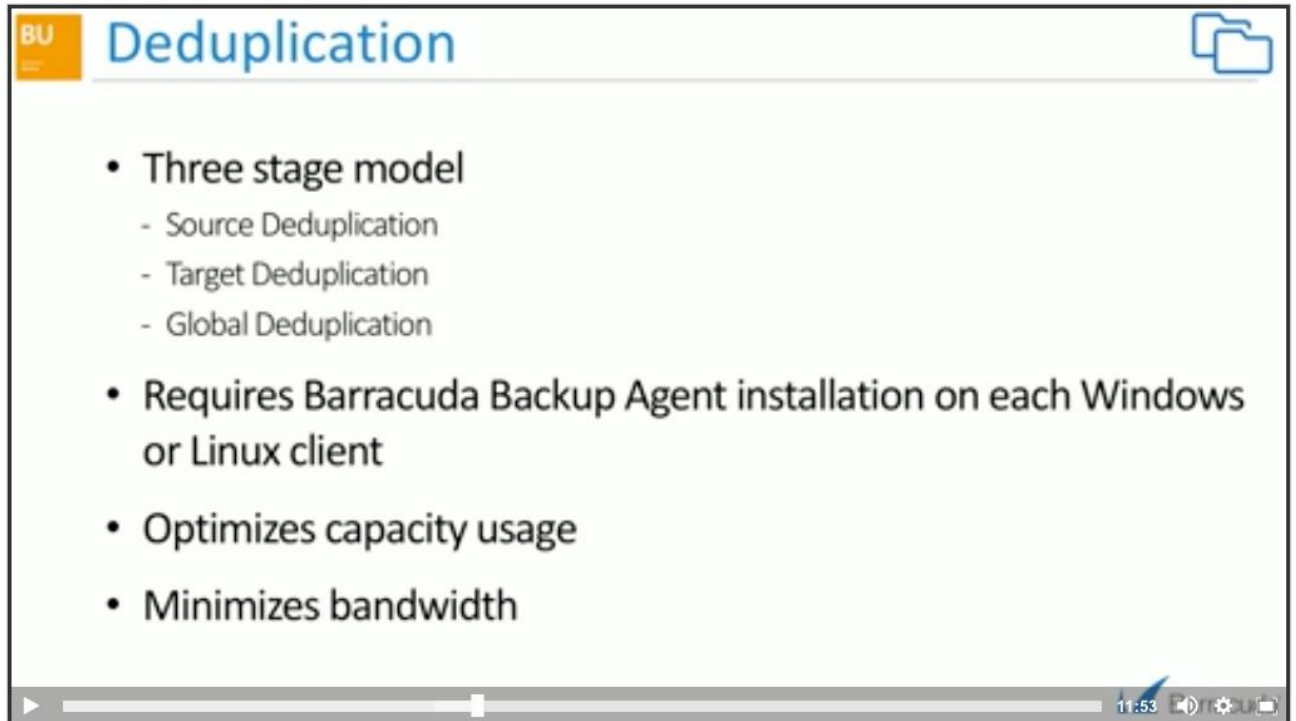
| Barracuda Backup Appliances | Status | Raw | Actual | Files | Messages | Dedupe | Sources | Disk Usage |
|---|--------------------------------|-----------|-----------|-----------|----------|---------|---------|-----------------|
| Development Backup (ARB) 10.66.32.160 / Ann Arbor, MI | Local: Online Cloud: Online | 336.22 GB | 324.26 GB | 3,190,891 | 0 | 1.03x | 1 | 346.53 GB (36%) |
| HQ Backup (CAM) 10.66.32.159 / Campbell, CA | Local: Online Cloud: Online | 40.85 TB | 3.98 TB | 5,311,326 | 0 | 10.26x | 8 | 4.59 TB (55%) |
| Office 365 Backup Ann Arbor, MI | Cloud: Online | 21.39 GB | 11.24 GB | 832,383 | 0 | 1.42x | 3 | N/A |
| Receiver Vx (HQ) 10.66.32.163 / Campbell, CA | Local: Online Cloud: Online | 0 bytes | 0 bytes | 0 | 0 | Unknown | 0 | 2.60 TB (65%) |

Protect Your Critical Data from a Single Pane of Glass

Barracuda Backup provides a simple web-based management tool for protecting your business data regardless of location and source.

27 <https://www.barracuda.com/products/backup/gallery#paranav-navbar>

1 52. The Accused Instrumentalities further includes a controller configured to
2 “compare the management information edited by the editor with management
3 information of data stored in the apparatus.” For example, the client will perform
4 deduplication and determine whether or not the data to be transferred is already on the
5 back up appliance. Only information that has not already been sent to the Back Up
6 appliance will be transmitted:



19 [https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-](https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/)
20 [barracuda-backup/](https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/)

1 **BU** **Inline Deduplication**

- 2 • File is logically divided into small data chunks
- 3 • Each chunk is assigned a unique hash (digital fingerprint)
- 4 - MD5 and SHA1 checksums

5

6

7 **Barracuda Backup Appliance**

8 **Client Machine**

9 Hash Identifiers stored in Database → Generate Checksums during Backup → Compare to Checksums/Hashes in Database → Write new Data to Disk

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The diagram illustrates the inline deduplication process. On the left, a 'Client Machine' is shown with a 'Hash Identifiers stored in Database' icon. An arrow labeled 'Generate Checksums during Backup' points to a series of three folder icons, each with an 'X' over it, representing data chunks. A second arrow labeled 'Compare to Checksums/Hashes in Database' points from these chunks to a 'Barracuda Backup Appliance' icon on the right. A final arrow labeled 'Write new Data to Disk' points from the appliance to two folder icons representing the destination disk.

13 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

15 **BU** **Source-Based Deduplication**

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18 **Client Machine**

19 BBA Tracking Database → Data Compression and Deduplication → Duplicated Data → **Barracuda Backup Appliance**

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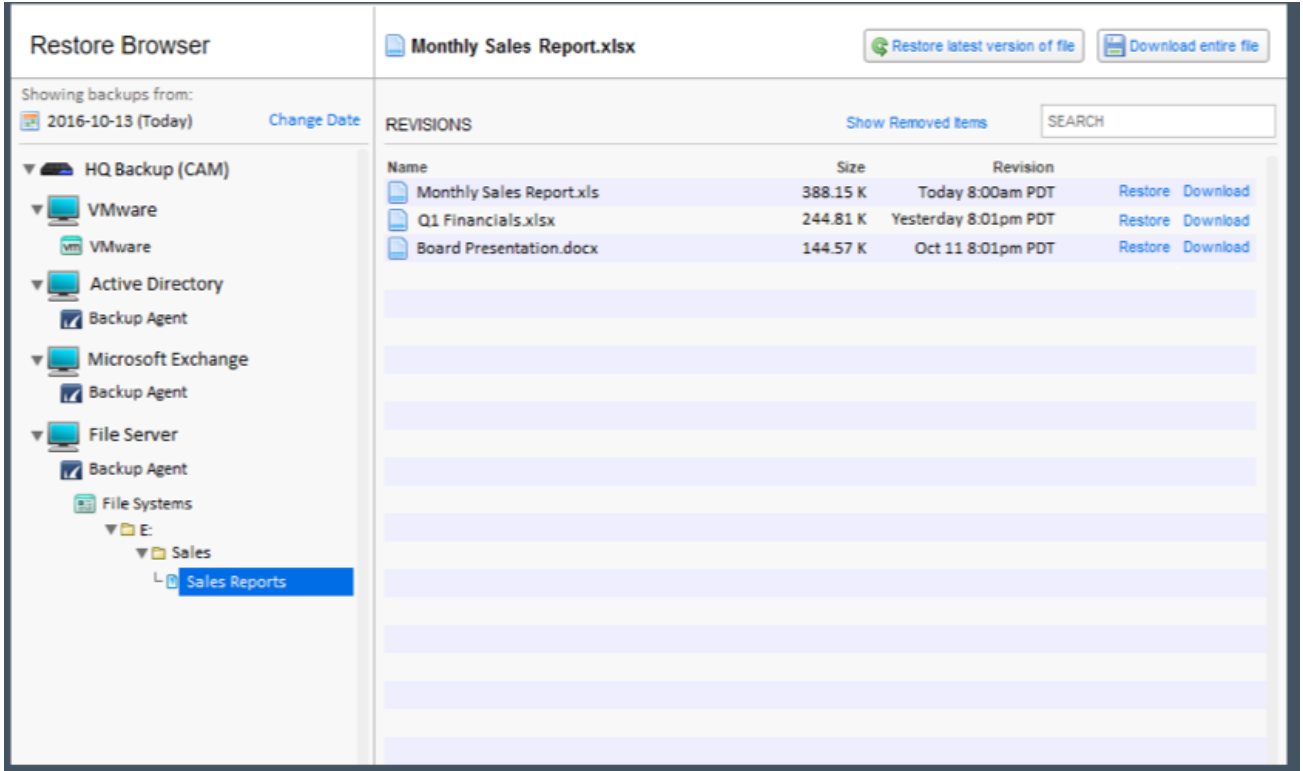
25

26

The diagram illustrates the source-based deduplication process. On the left, a 'Client Machine' is shown with a 'BBA Tracking Database' icon. An arrow points from the database to a series of three folder icons, each with an 'X' over it, representing data chunks. A second arrow labeled 'Data Compression and Deduplication' points from these chunks to a 'Barracuda Backup Appliance' icon on the right. A final arrow labeled 'Duplicated Data' points from the appliance to two folder icons representing the destination disk.

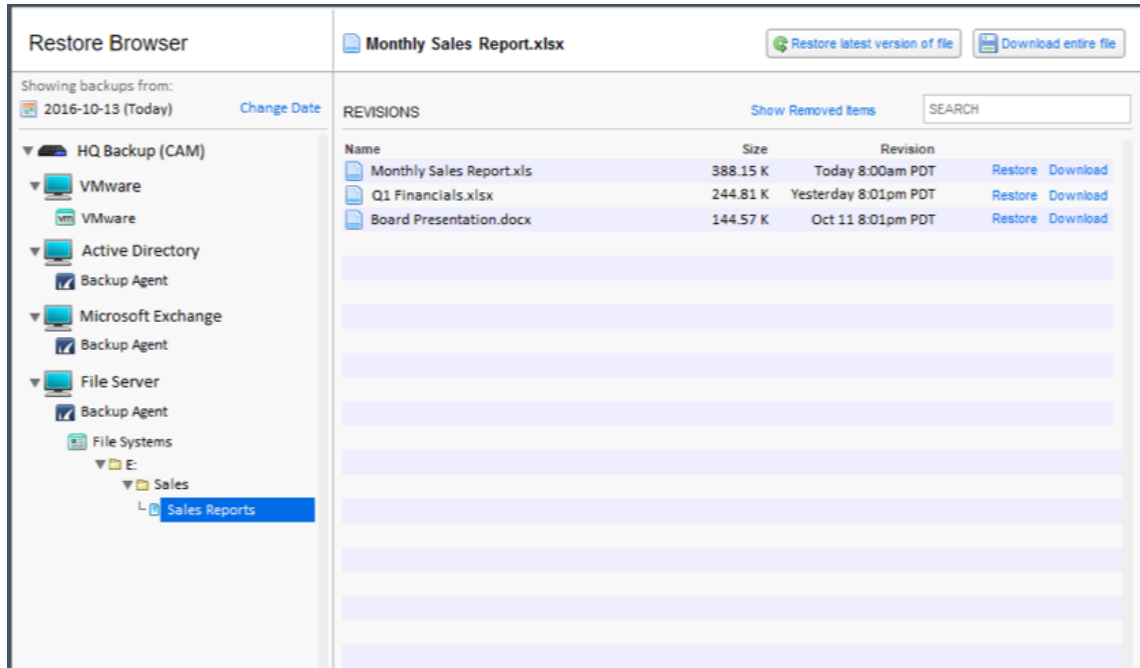
27 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

1 Likewise, the Accused Instrumentalities can monitor each file that has been backed up
 2 and determine when it was last revised:



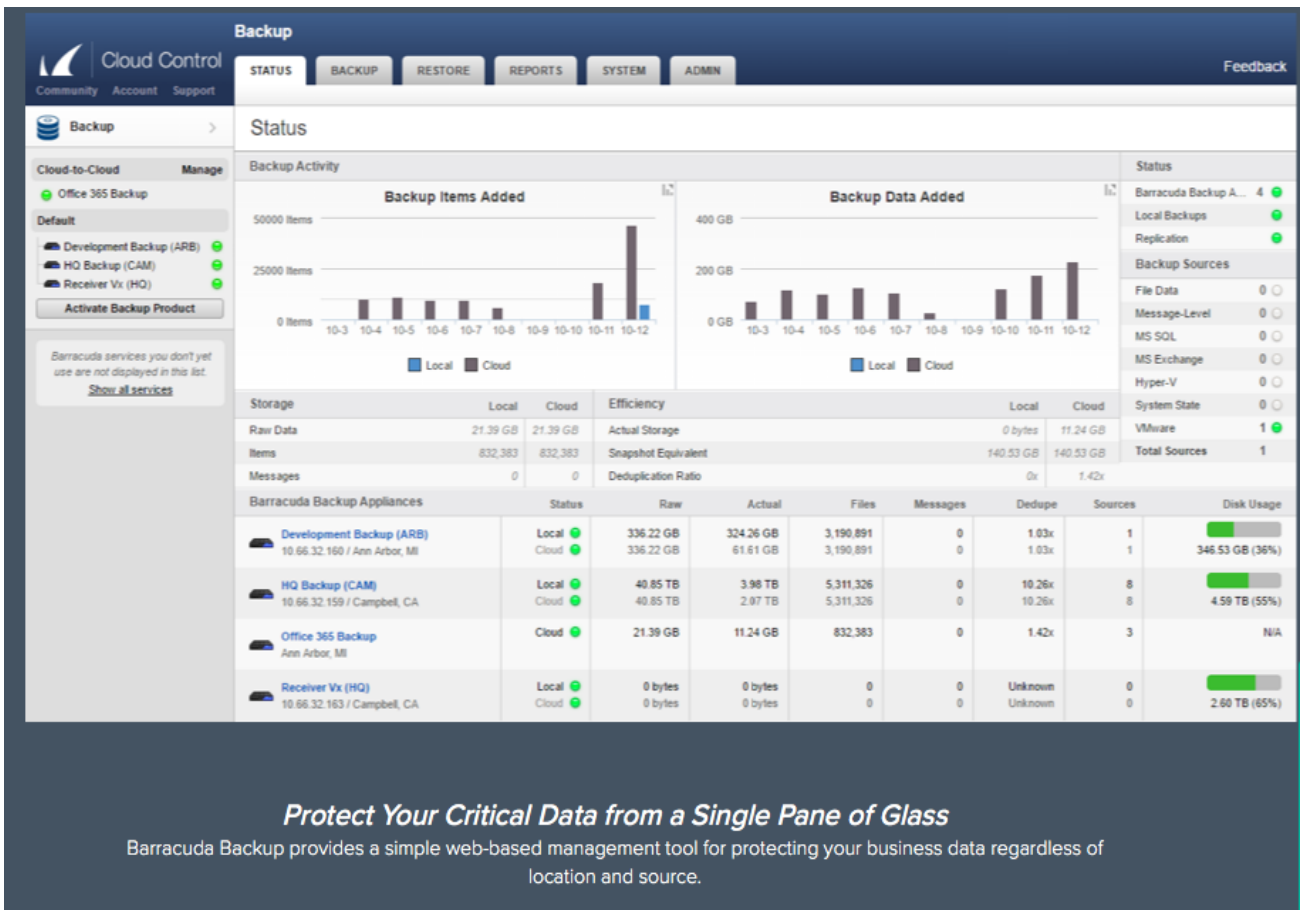
17 <https://www.barracuda.com/products/backup/gallery>

18 53. The Accused Instrumentalities further include a controller configured to
 19 “determine a size of the selected data in the communication apparatus.” For example,
 20 the Accused Instrumentalities make a record of the size of the data that was
 21 communicated by the communication apparatus:



<https://www.barracuda.com/products/backup/gallery#paranav-navbar>

54. The Accused Instrumentalities further includes a controller configured to “transmit data in the communication apparatus based on result of the comparison and the determination.” For example, the Accused Instrumentalities monitor the data in the backup appliances and will only transfer the data based in part on the results of the comparison:



<https://www.barracuda.com/products/backup/gallery#paranav-navbar>

55. Barracuda also infringes other claims of the ‘751 Patent, directly and through inducing infringement and contributory infringement.

56. 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’ accused features, Barracuda has injured Data Scape and is liable to Data Scape for infringement of the ‘751 Patent pursuant to 35 U.S.C. § 271.

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

COUNT IV

INFRINGEMENT OF U.S. PATENT NO. 9,715,893

1
2
3 58. Plaintiff realleges and incorporates by reference the foregoing paragraphs,
4 as if fully set forth herein. Data Scape is the owner by assignment of United States
5 Patent No. 9,715,893 (“the ‘893 Patent”) entitled “Recording apparatus, server
6 apparatus, recording method, program and storage medium.” The ‘893 Patent was duly
7 and legally issued by the United States Patent and Trademark Office on Jul. 25, 2017.
8 A true and correct copy of the ‘893 Patent is included as Exhibit E.

9 59. On information and belief, Barracuda has offered for sale, sold and/or
10 imported into the United States Barracuda products and services that infringe the ‘893
11 patent, and continues to do so. By way of illustrative example, these infringing products
12 and services include, without limitation, Barracuda’s products and services, *e.g.*,
13 Barracuda Backup Physical Appliance Models 190, 295, 290,390, 490, 690, 790, 890,
14 895, 990, 995, 1090, 6090, 8090, 9090, 10090, Barracuda Backup Virtual Appliances,
15 Barracuda Cloud, and all versions and variations thereof since the issuance of the ‘893
16 Patent (“Accused Instrumentalities”).

17 60. On information and belief, Barracuda has directly infringed and continues
18 to infringe the ‘893 Patent, for example, by making, selling, offering for sale, and/or
19 importing the Accused Instrumentalities, and through its own use and testing of the
20 Accused Instrumentalities, which constitute an information processing apparatus of
21 Claim 32 of the ‘893 Patent comprising: circuitry configured to automatically read first
22 management data from a first storage medium, the first management data identifying
23 files of source data recorded on the first storage medium, automatically identifying one
24 of the files of source data based on the first management data and second management
25 data, the second management data identifying files of transferred data stored on a
26 second storage medium, the one of the files of source data being absent from the second
27 storage medium, automatically transfer the one of the files of source data to the second
28 storage medium, the one of the files of the source data being transferred becoming one

1 of the files of transferred data, and automatically output transferring status of the one of
2 the files of source data by a symbolic figure. Upon information and belief, Barracuda
3 uses the Accused Instrumentalities, which are infringing systems, for its own internal
4 non-testing business purposes, while testing the Accused Instrumentalities, and while
5 providing technical support and repair services for the Accused Instrumentalities to
6 Barracuda's customers.

7 61. On information and belief, Barracuda has had knowledge of the '893
8 Patent since at least the filing of the original Complaint in this action, or shortly
9 thereafter, and on information and belief, Barracuda knew of the '893 Patent and knew
10 of its infringement, including by way of this lawsuit. By the time of trial, Barracuda will
11 have known and intended (since receiving such notice) that their continued actions
12 would actively induce and contribute to the infringement of the claims of the '893
13 Patent.

14 62. On information and belief, use of the Accused Instrumentalities in their
15 ordinary and customary fashion results in infringement of the claims of the '893 Patent.

16 63. Barracuda's affirmative acts of making, using, selling, offering for sale,
17 and/or importing the Accused Instrumentalities have induced and continue to induce
18 users of the Accused Instrumentalities to use the Accused Instrumentalities in their
19 normal and customary way to infringe the claims of the '893 Patent, knowing that when
20 the Accused Instrumentalities are used in their ordinary and customary manner, such
21 systems constitute an infringing information processing apparatus comprising: circuitry
22 configured to automatically read first management data from a first storage medium,
23 the first management data identifying files of source data recorded on the first storage
24 medium, automatically identifying one of the files of source data based on the first
25 management data and second management data, the second management data
26 identifying files of transferred data stored on a second storage medium, the one of the
27 files of source data being absent from the second storage medium, automatically transfer
28 the one of the files of source data to the second storage medium, the one of the files of

1 the source data being transferred becoming one of the files of transferred data, and
2 automatically output transferring status of the one of the files of source data by a
3 symbolic figure. For example, Barracuda explains to customers the benefits of using
4 the Accused Instrumentalities, such as by touting their advantages: ““Barracuda Backup
5 enables business to run seamlessly by minimizing downtime and preventing data loss,
6 providing the industry’s easiest to deploy and manage all-in-one data protection
7 solution.” https://www.barracuda.com/resources/Barracuda_Backup_DS_US.

8 Barracuda further notes that “Barracuda Backup lets you protect against local disasters
9 and data loss by using the cloud to simply and cost-effectively get data off-site. It lets
10 you securely and efficiently replicate data to the Barracuda Cloud, a remote physical
11 backup appliance, a remote virtual backup appliance, or AWS for off-site protection.”

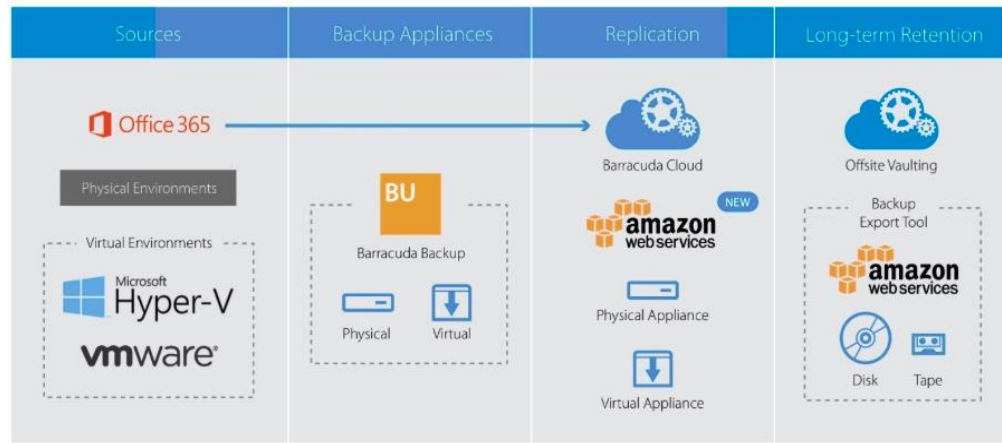
12 <https://www.barracuda.com/products/backup>. Barracuda also induces its customers to
13 use the Accused Instrumentalities to infringe other claims of the ‘893 Patent. Barracuda
14 specifically intended and was aware that the normal and customary use of the Accused
15 Instrumentalities on compatible systems would infringe the ‘893 Patent. Barracuda
16 performed the acts that constitute induced infringement, and would induce actual
17 infringement, with the knowledge of the ‘893 Patent and with the knowledge, or willful
18 blindness to the probability, that the induced acts would constitute infringement. On
19 information and belief, Barracuda engaged in such inducement to promote the sales of
20 the Accused Instrumentalities, *e.g.*, through Barracuda’s user manuals, product support,
21 marketing materials, demonstrations, installation support, and training materials to
22 actively induce the users of the accused products to infringe the ‘893 Patent.
23 Accordingly, Barracuda has induced and continues to induce end users of the accused
24 products to use the accused products in their ordinary and customary way with
25 compatible systems to make and/or use systems infringing the ‘893 Patent, knowing
26 that such use of the Accused Instrumentalities with compatible systems will result in
27 infringement of the ‘893 Patent. Accordingly, Barracuda has been (since at least as of

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1 filing of the original complaint), and currently is, inducing infringement of the ‘893
2 Patent, in violation of 35 U.S.C. § 271(b).

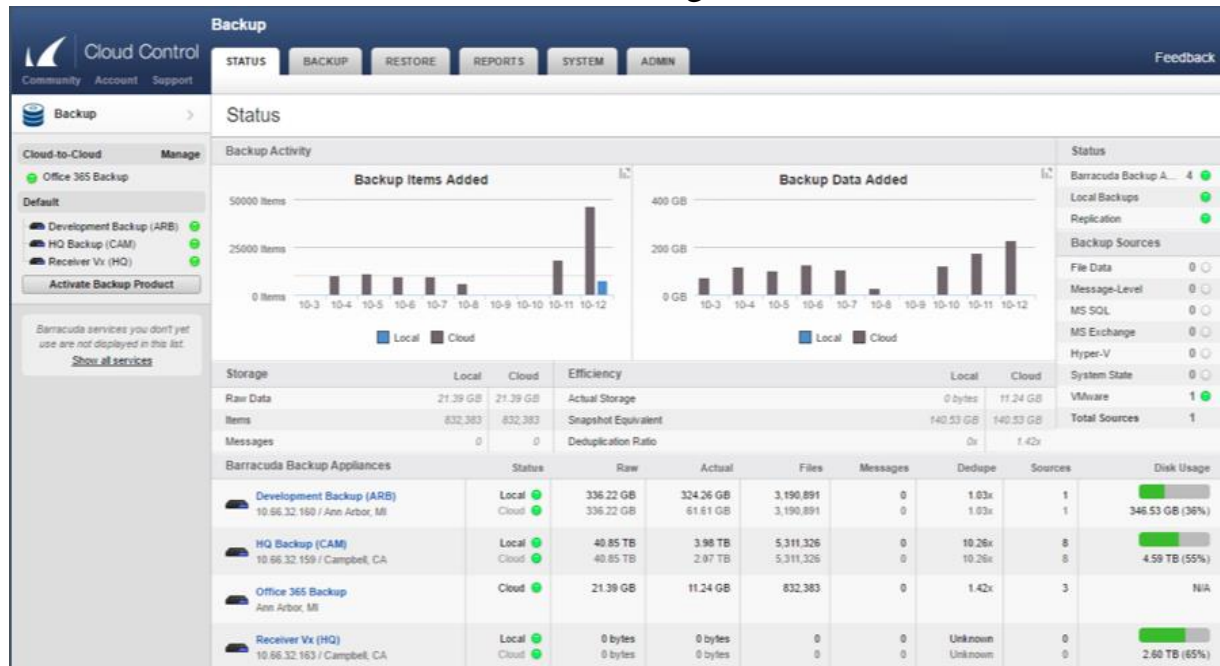
3 64. Barracuda has also infringed, and continues to infringe, claims of the ‘893
4 patent by offering to commercially distribute, commercially distributing, making,
5 and/or importing the Accused Instrumentalities, which are used in practicing the
6 process, or using the systems, of the ‘893 patent, and constitute a material part of the
7 invention. Barracuda knows the components in the Accused Instrumentalities to be
8 especially made or especially adapted for use in infringement of the ‘893 patent, not a
9 staple article, and not a commodity of commerce suitable for substantial noninfringing
10 use. For example, the ordinary way of using the Accused Instrumentalities infringes the
11 patent claims, and as such, is especially adapted for use in infringement. Accordingly,
12 Barracuda has been, and currently is, contributorily infringing the ‘893 patent, in
13 violation of 35 U.S.C. § 271(c).

14 65. The Accused Instrumentalities include “[a]n information processing
15 apparatus, comprising: circuitry configured to automatically read first management data
16 from a first storage medium, the first management data identifying files of source data
17 recorded on the first storage medium.” For example, the Accused Instrumentalities
18 include an information processing apparatus (e.g., Clients, such as e.g., mobile devices,
19 native desktop client, virtual) having a first storage medium communicating with
20 Barracuda Back up physical and virtual appliances, and replication zones including a
21 second storage medium (e.g., Barracuda Cloud, Amazon Web Services, or network
22 drives) a second storage medium.
23 https://www.barracuda.com/resources/Barracuda_Backup_DS_US.



https://www.barracuda.com/resources/Barracuda_Backup_DS_US.

For example, the Accused Instrumentalities continuously monitor the data that is transferred between the first and second storage media:



<https://www.barracuda.com/products/backup/gallery#paranav-navbar>. As a further example, the Accused Instrumentalities let the user select folders or files to synchronize:

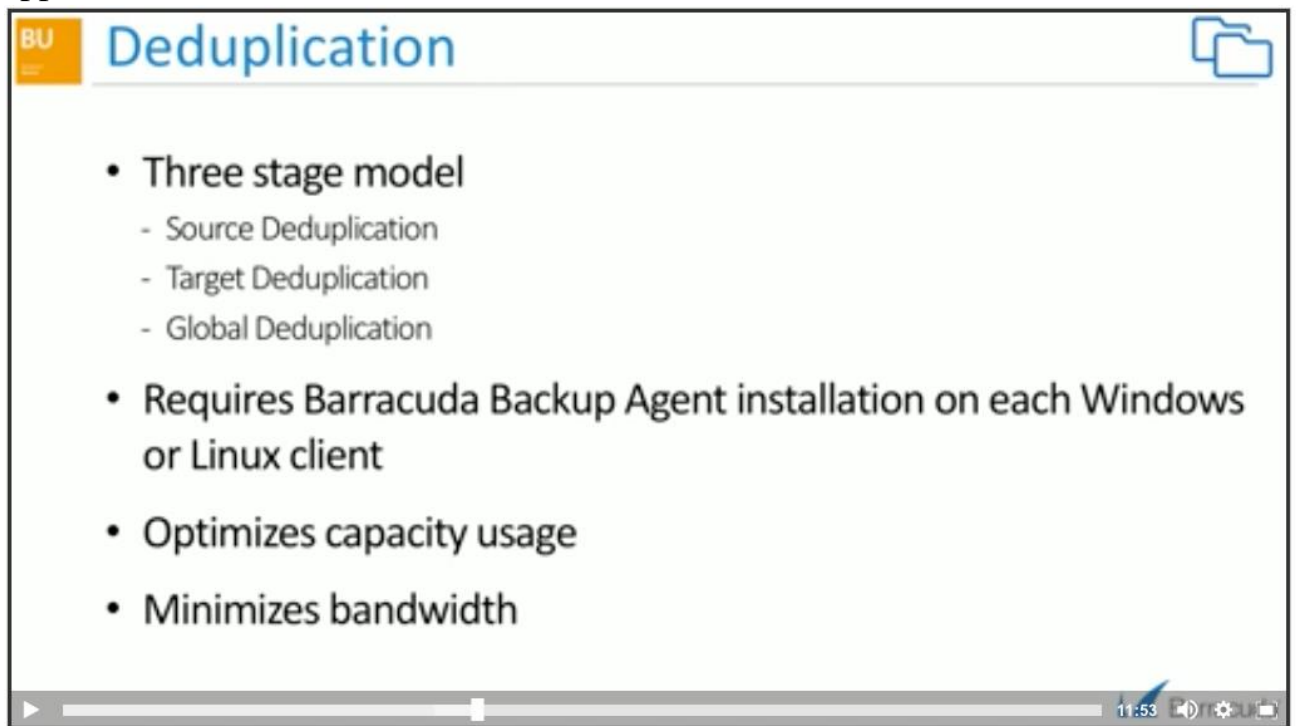
5. Restoring Files

5.1 Lab Instructions

In this lab, you will learn how to install the Barracuda Backup Agent on a Windows machine, back up a single file, and restore a deleted file.

1 Barracuda Backup Foundation -BU01 available at
2 [https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-](https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831)
3 [guide/?fc=831](https://campus.barracuda.com/product/backup/download/12D0/bu01-foundation-lab-guide/?fc=831).

4 66. The Accused Instrumentalities include circuitry configured to
5 “automatically identifying one of the files of source data based on the first management
6 data and second management data, the second management data identifying files of
7 transferred data stored on a second storage medium, the one of the files of source data
8 being absent from the second storage medium.” For example, the client will perform
9 deduplication and determine whether or not the data to be transferred is already on the
10 back up appliance. Only information that has not already been sent to the Back Up
11 appliance will be transmitted:

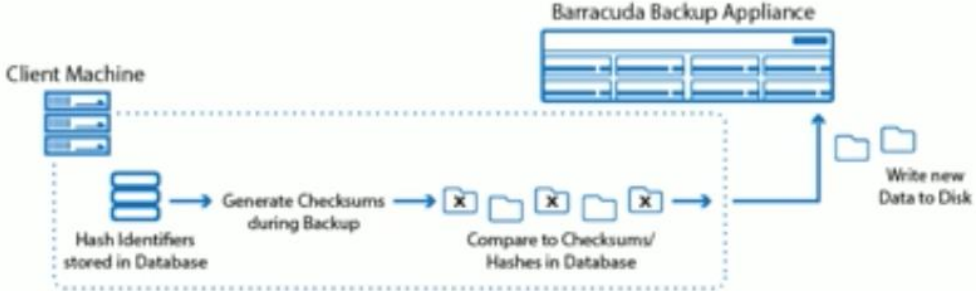


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24 [https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-](https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/)
25 [barracuda-backup/](https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/)

1 **BU**

Inline Deduplication

- 2 • File is logically divided into small data chunks
- 3 • Each chunk is assigned a unique hash (digital fingerprint)
- 4 - MD5 and SHA1 checksums



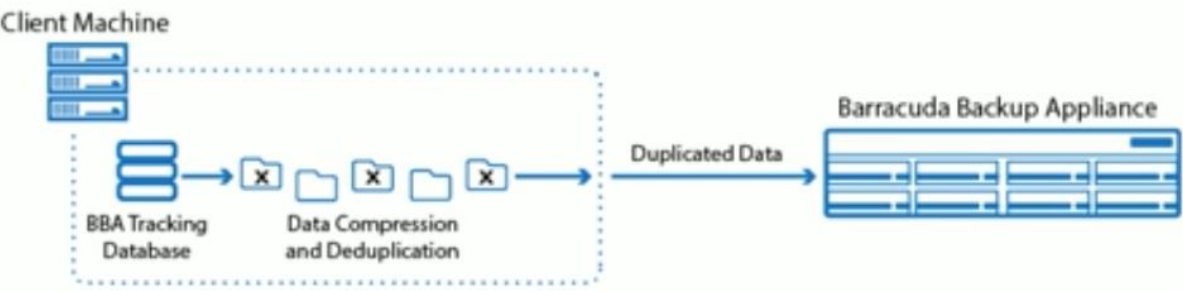
The diagram illustrates the inline deduplication process. On the left, a 'Client Machine' is shown with a 'Hash Identifiers stored in Database' icon. An arrow labeled 'Generate Checksums during Backup' points to a series of three folder icons, each with an 'X' over it, labeled 'Compare to Checksums/ Hashes in Database'. An arrow then points from these folders to a 'Barracuda Backup Appliance' icon on the right, which is labeled 'Write new Data to Disk'. The entire process is enclosed in a dashed box.

10 11 12

13 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

15 **BU**

Source-Based Deduplication

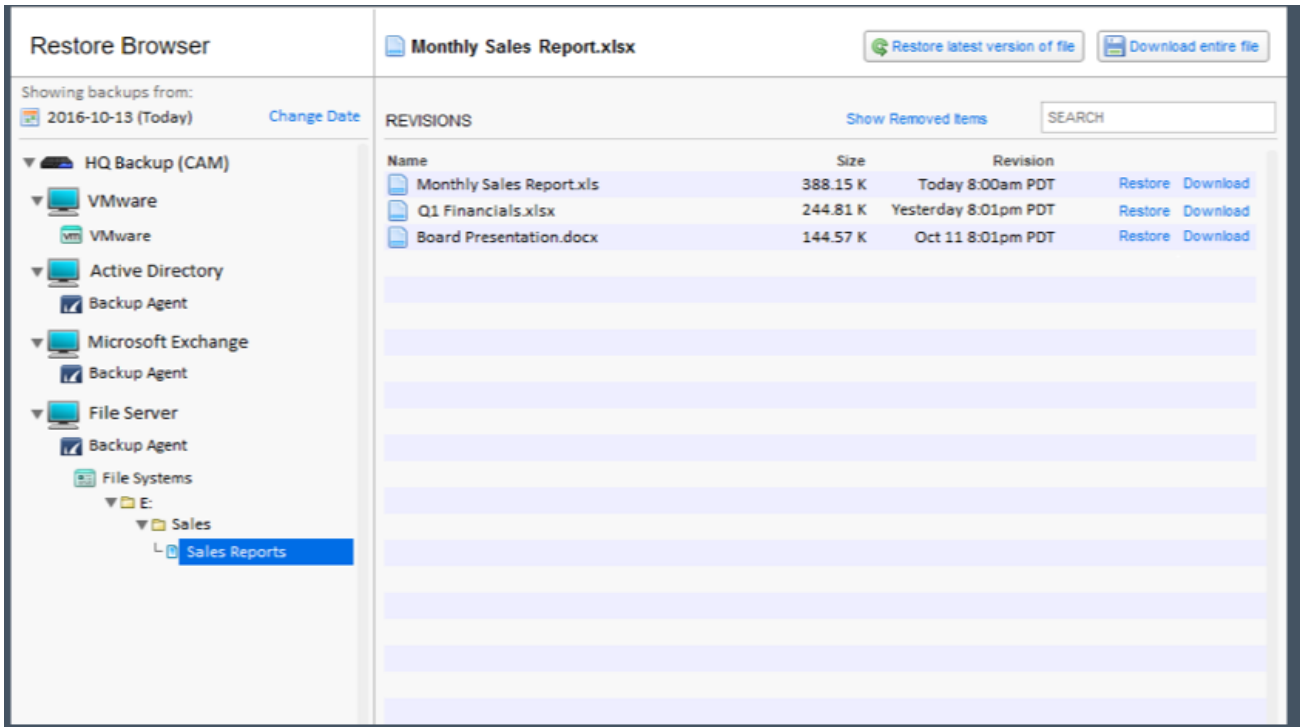


The diagram illustrates the source-based deduplication process. On the left, a 'Client Machine' is shown with a 'BBA Tracking Database' icon. An arrow points to a series of three folder icons, each with an 'X' over it, labeled 'Data Compression and Deduplication'. An arrow labeled 'Duplicated Data' then points from these folders to a 'Barracuda Backup Appliance' icon on the right.

16 17 18 19 20 21 22 23 24 25 26

27 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

1 Likewise, the Accused Instrumentalities can monitor each file that has been backed up
 2 and determine when it was last revised:



15 <https://www.barracuda.com/products/backup/gallery>

16 67. The Accused Instrumentalities further include circuitry configured to
 17 “automatically transfer the one of the files of source data to the second storage medium,
 18 the one of the files of the source data being transferred becoming one of the files of
 19 transferred data.” For example, the client will automatically perform deduplication and
 20 determine whether or not the data to be transferred is already on the back up appliance.
 21 Only information that has not already been sent to the Back Up appliance will be
 22 transmitted:

1 **BU** **Deduplication**

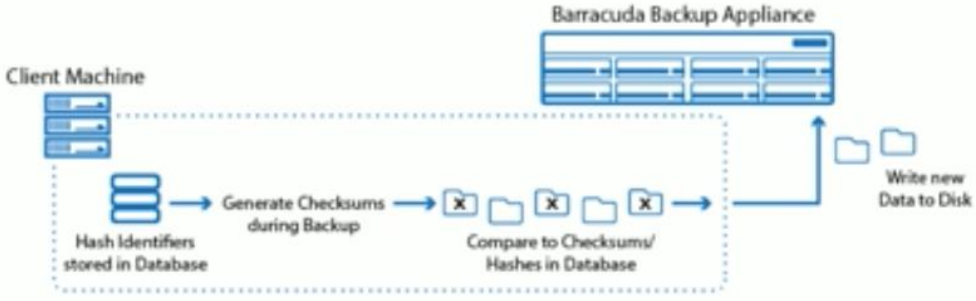
- 2
- 3 • **Three stage model**
 - 4 - Source Deduplication
 - 5 - Target Deduplication
 - 6 - Global Deduplication
- 7 • **Requires Barracuda Backup Agent installation on each Windows or Linux client**
- 8
- 9 • **Optimizes capacity usage**
- 10 • **Minimizes bandwidth**
- 11

12

13 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

15 **BU** **Inline Deduplication**

- 16
- 17 • **File is logically divided into small data chunks**
- 18 • **Each chunk is assigned a unique hash (digital fingerprint)**
 - 19 - MD5 and SHA1 checksums
- 20



The diagram illustrates the inline deduplication process. On the left, a 'Client Machine' is shown with a 'Hash Identifiers stored in Database' icon. An arrow labeled 'Generate Checksums during Backup' points to a series of three folder icons, each with an 'X' over it, labeled 'Compare to Checksums/Hashes in Database'. An arrow from this comparison step points to a 'Barracuda Backup Appliance' icon. From the appliance, an arrow points to a folder icon labeled 'Write new Data to Disk'. The entire process is enclosed in a dashed box.

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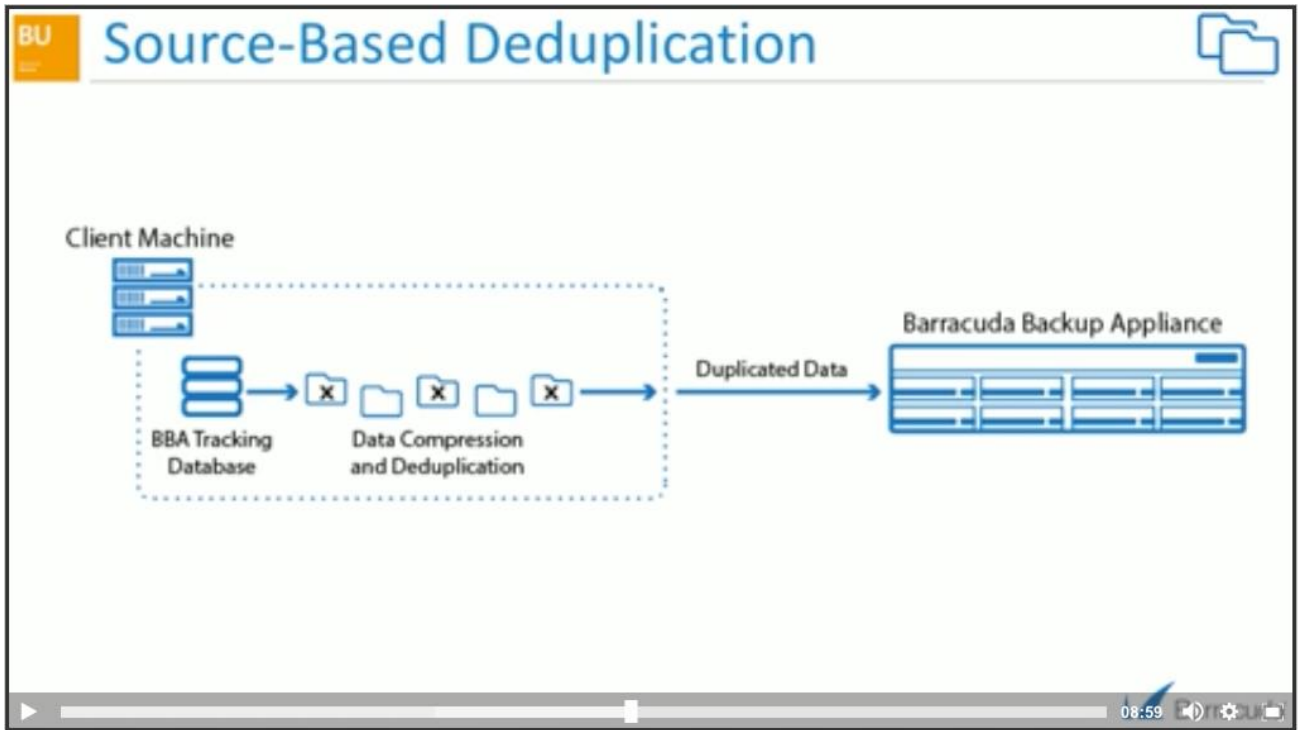
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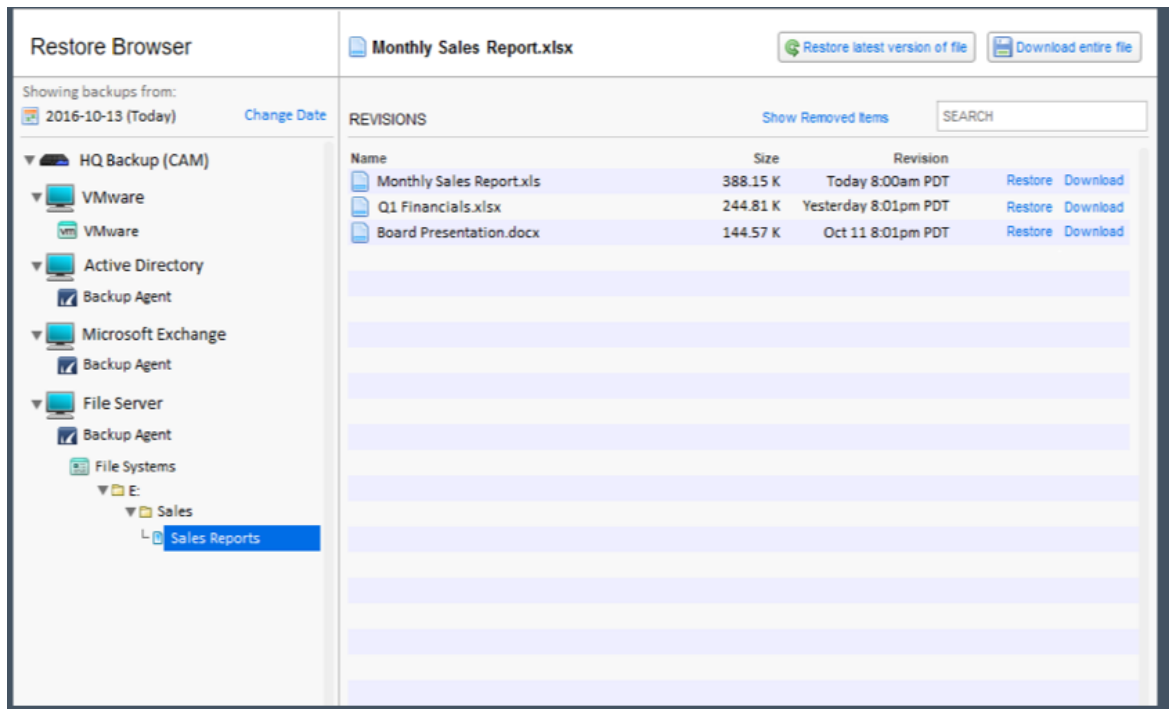
27 <https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

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<https://campus.barracuda.com/product/backup/download/1232/bu01010-introducing-barracuda-backup/>

68. The Accused Instrumentalities further include circuitry configured to “automatically output transferring status of the one of the files of source data by a symbolic figure.” For example, after being transfer each file will be displayed by an icon name, and information concerning its size and revision history:



<https://www.barracuda.com/products/backup/gallery>

69. Barracuda also infringes other claims of the ‘893 Patent, directly and through inducing infringement and contributory infringement.

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’ accused features, Barracuda has injured Data Scape and is liable to Data Scape for infringement of the ‘893 Patent pursuant to 35 U.S.C. § 271.

71. As a result of Barracuda’s infringement of the ‘893 Patent, Plaintiff Data Scape is entitled to monetary damages in an amount adequate to compensate for Barracuda’s infringement, but in no event less than a reasonable royalty for the use made of the invention by Barracuda, together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Data Scape respectfully requests that this Court enter:

- a. A judgment in favor of Plaintiff that Defendants have infringed, literally and/or under the doctrine of equivalents the ’929 Patent, ’751 Patent, ’581 Patent, and ‘893 Patent (the “asserted patents”);

