

Backup Exec Deduplication Assessment Tool

Frequently Asked Questions

Introduction

To assist partners as they sell and implement Symantec Backup Exec 2012 and the Symantec Backup Exec 3600 Appliance and offer related services, Symantec has released the Backup Exec Deduplication Assessment Tool (BEDAT). The Backup Exec Deduplication Assessment Tool is available at no charge to Symantec partners and available for download from the Symantec PartnerNet portal.

The Backup Exec Deduplication Assessment Tool (BEDAT) is designed improve the experience partners have when selling and implementing Backup Exec solutions – such as Backup Exec 2012 or the Backup Exec 3600 Appliance – in their customer's environments. The primary focus of the Backup Exec Deduplication Assessment Tool (BEDAT) is enabling partners to offer pre-sales assessments of customer environments as a service. These assessments will help partners set customer expectations around Backup Exec performance, deduplication, and other capabilities before implementing Backup Exec. These assessments will also help set customer expectations and identify potential issues in an environment proactively, allowing the implementation phase to go smoothly and ensuring the Backup Exec solution performs according to expectations.

Business Value

The Backup Exec Deduplication Assessment Tool (BEDAT) includes two primary tool functions designed to help partners offer environmental assessment services to their customers. These are as follows:

- Deduplication Assessment
- Front-end Capacity Analysis

By enabling partners to offer environmental assessment services to their customers through these tool functions, partners will enjoy increased revenue from Backup Exec sales and higher customer satisfaction rates.

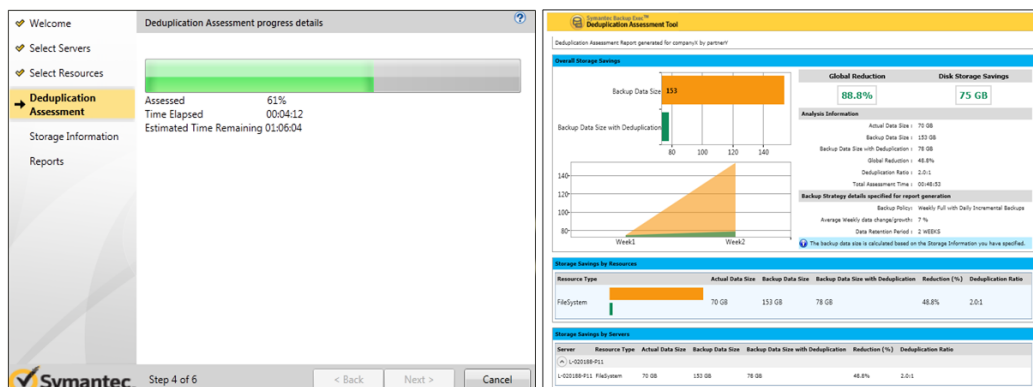


Figure 1: Deduplication Assessment Screenshots

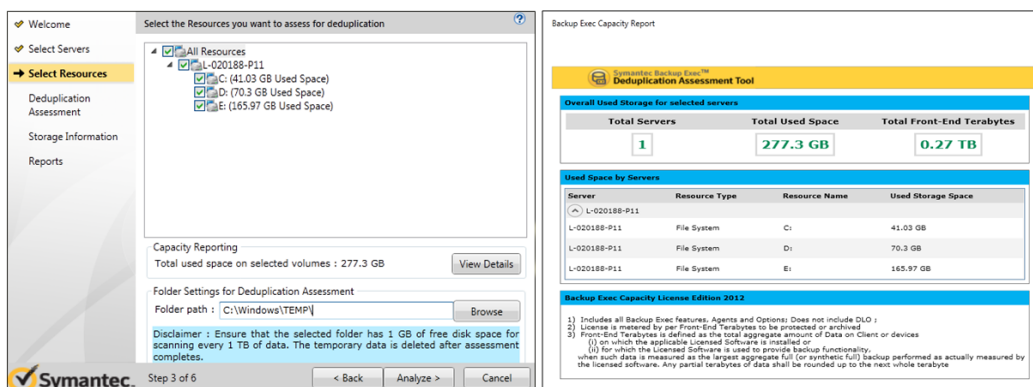


Figure 2: Front-end Capacity Analysis Screenshots

This FAQ Document

This Frequently Asked Questions (FAQ) document is designed to allow customers to quickly and easily find answers to many common questions around the Backup Exec Deduplication Assessment Tool and its capabilities.



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Deduplication Assessment Tool FAQ

1. What is the Backup Exec Deduplication Assessment Tool?

The Backup Exec Deduplication Assessment Tool is a free partner utility designed to improve the experience partners have when selling and implementing Backup Exec solutions – such as Backup Exec software or appliance offerings – in their customer environments.

The primary focus of the Backup Exec Deduplication Assessment Tool is enabling partners to offer pre-sales assessments of customer environments as a service. These assessments will help partners set customer expectations around Backup Exec performance, deduplication, and other capabilities before implementing the Backup Exec solution.

2. How does the Backup Exec Deduplication Assessment Tool work?

The Backup Exec Deduplication Assessment tool deploys a temporary software agent to each server selected for deduplication scanning. This temporary software agent scans selected Windows volumes and applications and generates deduplication block fingerprints for each. This block fingerprint data is transmitted back to the primary system on which the Deduplication Assessment Tool is being run and used to calculate important results, such as deduplication percentages among different servers and resources, deduplication ratios, storage saved through deduplication over time, and more. This temporary software agent is automatically removed from each server after deduplication scanning processes have been completed.

VSS snapshots are captured of selected Windows volumes and applications allowing them to be scanned for deduplication block fingerprint information without having to take the target server or application offline.

3. Do I need to run the Backup Exec Deduplication Assessment Tool separately on each server I want to scan?

No. The Deduplication Assessment Tool can be run on a single system, and from that single system it can scan the local system as well as other remote servers available on the network. When used in this mode, the Deduplication Assessment Tool can generate deduplication predictions for each server selected for scanning as well as global deduplication predictions across all servers – in other words, how well all data from all servers will deduplicate against each other.

While the Deduplication Assessment Tool can also be run individually on each server, in this mode the user will not receive global deduplication predictions that cover all servers in the environment; results will only apply to the individual server.

4. Do I need to take my servers or applications offline before running the Backup Exec Deduplication Assessment Tool?

No. VSS snapshots are captured of selected Windows volumes and applications allowing them to be scanned for deduplication block fingerprint information without having to take the target server or application offline.

5. What performance impact will the Backup Exec Deduplication Assessment Tool have on the servers in my environment?

The Deduplication Assessment Tool can have a relatively high performance impact on the servers scanned for deduplication assessment, particularly disk I/O. It is recommended that the Deduplication Assessment Tool be used during hours of low server activity, such as during night or off hours.

6. How long will it take the Backup Exec Deduplication Assessment Tool to scan my environment?

The time required to complete deduplication assessment scans will vary from server to server and is largely dependent upon the performance capabilities of the disk subsystem in a particular server as well as the amount of data on a particular server that has been selected for assessment. On average, the Deduplication Assessment Tool will process around 2 GB of data per minute.

It's important to note that when scanning multiple remote servers simultaneously, the overall deduplication assessment process will be dependent upon the server that takes the longest to complete the scan. This may be the server with the most data, or the server with the slowest hardware.

7. Does the Backup Exec Deduplication Assessment Tool deploy a software package to the servers I select for deduplication assessment?

Yes. The Backup Exec Deduplication Assessment tool deploys a temporary software agent to each server selected for deduplication scanning. This temporary software agent scans selected Windows volumes and applications and generates deduplication block fingerprints for each. This block

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fingerprint data is transmitted back to the primary system on which the Deduplication Assessment Tool is being run and used to calculate important results, such as deduplication percentages, deduplication ratios, storage saved through deduplication over time, and more. This temporary software agent is automatically removed from each server after deduplication scanning processes have been completed.

8. What method does the Backup Exec Deduplication Assessment Tool use to scan servers for deduplication block fingerprints?

VSS snapshots are captured of selected Windows volumes and applications allowing them to be scanned for deduplication block fingerprint information without having to take the target server or application offline.

9. What data types will the Backup Exec Deduplication Assessment Tool discover and analyze on my servers?

The Deduplication Assessment Tool currently supports the assessment of the following types of data:

- Windows file system (NTFS)
- SQL
- Exchange

To submit an enhancement request or additional tool idea for the Backup Exec Deduplication Assessment Tool, please go here: <https://www-secure.symantec.com/connect/backup-and-recovery/ideas>

10. How many servers should I scan concurrently using the Backup Exec Deduplication Assessment Tool?

From a best practices perspective, around 20 servers can be scanned concurrently from one instance of the Deduplication Assessment Tool. This upper limit best practice will vary depending upon the hardware performance capabilities of any individual environment. For very large environments, multiple run instances of the Deduplication Assessment Tool can be used, or the Deduplication Assessment Tool can be run on a smaller number of “representative” servers and the results can be extrapolated to estimate what the results would be for the larger environment.

11. To what Symantec products – that support data deduplication – do the results generated by the Backup Exec Deduplication Assessment Tool apply?

The results offered by the Deduplication Assessment Tool are designed to represent the deduplication capabilities of Backup Exec software and hardware solutions that support deduplication. The results are also an accurate representation for the NetBackup product and its deduplication capabilities, as the core deduplication technology is the same between Backup Exec and NetBackup.

12. What features are currently available in the Backup Exec Deduplication Assessment Tool?

The Backup Exec Deduplication Assessment Tool currently includes two primary tool functions:

- Deduplication Assessment
- Front-end Capacity Analysis

13. Will additional tools and features be added in the future?

Yes. Additional tools will be added over time according to the feedback and requests we receive from our partner community. To submit an enhancement request or additional tool idea, please go here: <https://www-secure.symantec.com/connect/backup-and-recovery/ideas>

14. Where can I download the Backup Exec Deduplication Assessment Tool?

The Backup Exec Deduplication Assessment Tool is available for download from the Symantec PartnerNet portal. A direct link to the download page can be found here: <https://partnernet.symantec.com/Partnercontent/Product/BEDAT.jsp>

15. How much does the Backup Exec Deduplication Assessment Tool cost?

At this time, the Backup Exec Deduplication Assessment Tool is offered to our partners at no charge.

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16. What is the general architecture of the Backup Exec Deduplication Assessment Tool?

The Backup Exec Deduplication Assessment Tool is a single program or binary that runs independent from any other Symantec product or solution. The Backup Exec Deduplication Assessment Tool will deploy a temporary software agent to network servers selected for scanning, which is automatically removed after deduplication scanning processes have been completed.

17. For whom was the Backup Exec Deduplication Assessment Tool designed?

The Backup Exec Deduplication Assessment Tool was designed for Symantec partners who sell, implement, and support Backup Exec solutions. It is designed to enable partners to offer pre-sale environmental assessment services to their customers in order to help answer common customer questions, ensure the customer environment is ready for a Backup Exec solution, and more.

18. Can end user customers download and use the Backup Exec Deduplication Assessment Tool?

At this time, the Backup Exec Deduplication Assessment Tool is only available to the Symantec partner community. End user customers interested in the Backup Exec Deduplication Assessment Tool can contact a Symantec partner here: <http://partnerlocator.symantec.com/public/search/>

19. Does the Backup Exec Deduplication Assessment Tool transmit any information back to Symantec?

The Backup Exec Deduplication Assessment Tool is capable of transmitting non-personally identifiable telemetry information to Symantec for generic usage tracking and planning purposes. Users can opt-out of this data collection process by un-checking the associated checkbox presented at the beginning of the Backup Exec Deduplication Assessment Tool user experience.

The Backup Exec Deduplication Assessment Tool does not capture or transmit any actual data from the servers involved in scanning or assessment operations, even when the telemetry feature is enabled.

20. What operating systems are supported by the Backup Exec Deduplication Assessment Tool?

The Backup Exec Deduplication Assessment Tool supports most standard Windows operating systems.

Windows platforms from which the Backup Exec Deduplication Assessment Tool can be run/executed:

Windows Server Platforms

- Windows Server 2003 Family
- Windows Server 2008 including SP1 Family
- Windows Server 2008 R2 Family
- Windows 8 Server Family

Windows Small Business Server Platforms

- Windows Small Business Server 2003 Family
- Windows Small Business Server 2008 Family
- Windows Small Business Server 2011 Family
- Windows 8 Small Business Server Family

Windows Desktop/Laptop Platforms

- Windows Vista (Ultimate, Business, Enterprise) including SP1 SP2 SP3
- Windows XP Professional/Home (SP2 or later)
- Windows XP Media Center
- Windows 7 (Ultimate, Enterprise, Professional) including SP1
- Windows 8 Family

Windows platforms supported for assessment scanning, either local or remote:

Windows Server Platforms

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- Windows Server 2003 Family
- Windows Server 2008 including SP1 Family
- Windows Server 2008 R2 Family
- Windows 8 Server Family

Windows Small Business Server Platforms

- Windows Small Business Server 2003 Family
- Windows Small Business Server 2008 Family
- Windows Small Business Server 2011 Family
- Windows 8 Small Business Server Family

We support both x86 and x64 versions of the above operating systems.

21. Can I run the Backup Exec Deduplication Assessment Tool from my Windows laptop?

Yes, the Backup Exec Deduplication Assessment Tool can be run or executed from a Windows laptop. Make sure you have enough free disk space on your laptop when you do so.

22. Can I run the Backup Exec Deduplication Assessment Tool from my iPad?

The Backup Exec Deduplication Assessment Tool does not currently support iPads or other Apple devices. To submit an enhancement request or additional tool idea for the Backup Exec Deduplication Assessment Tool, please go here: <https://www-secure.symantec.com/connect/backup-and-recovery/ideas>

23. How do I update the Backup Exec Deduplication Assessment Tool to the latest available version?

The Backup Exec Deduplication Assessment Tool is enabled for automatic self-updates. When run on a system that is connected to the internet, the Backup Exec Deduplication Assessment Tool will automatically check for a newer toolkit version. If a newer version is found, the self-update process will occur automatically.

24. Does the Backup Exec Deduplication Assessment Tool support virtualized servers?

Yes, the Backup Exec Deduplication Assessment Tool fully supports virtualized servers. This includes the ability to perform assessment scans of virtual servers as well as the ability for the toolkit to be executed from a virtual server.

25. I'm experiencing a problem while using the Backup Exec Deduplication Assessment Tool. Where can I go for assistance?

Direct technical support is not available for the Backup Exec Deduplication Assessment Tool. However, partners can post problems or questions on the Backup Exec forum on the Symantec Connect portal here: <https://www-secure.symantec.com/connect/backup-and-recovery/forums/backup-exec>

26. I have a recommendation or feature request for the Backup Exec Deduplication Assessment Tool. Where can I go to submit my request?

Partners who have feature ideas for the Backup Exec Deduplication Assessment Tool are encouraged to provide them to Symantec. To submit an enhancement request, please go here: <https://www-secure.symantec.com/connect/backup-and-recovery/ideas>

27. I need to enable verbose logging in the Backup Exec Deduplication Assessment Tool to troubleshoot a problem. How do I do that?

To enable full logging, create a file named BEDAT.ini in the following location before you run the tool: '<system root folder>\temp'. The logs are created in the following location: '<system root folder>\temp\BEDAT_LOGS'.

28. What is maximum volume size supported by the Backup Exec Deduplication Assessment Tool for assessment?

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The Backup Exec Deduplication Assessment Tool does not have any known limitations on volume size. Internal tests have been successful on volumes of 4 TB in size.

29. I am getting incorrect results in the assessment report when I run the tool on non-english servers. What happened?

The tool is designed to run on systems configured with English locale. If you need to run the tool on non-english servers, you can do so by changing the locale of your server. Below are the steps to change the locale of the operating system:

1. In Control Panel, open **Regional and Language Options**.
2. On the Regional Options tab, from the **Select an item to match its preferences** drop-down list, select **English (United States)**.
3. Click **OK**.


If you use the Backup Exec Deduplication Assessment Tool to scan servers with non-English-US locale settings, you might see some unexpected results in the assessment reports.

30. The data sizes reported in the deduplication assessment report for a volume is less than actual data size reported by the operating system. Why is this?

The Backup Exec Deduplication Assessment Tool scans each file on volume to generate duplication fingerprints. During this process, there could be exceptions like low system memory or access denied or any internal error causing the Backup Exec Deduplication Assessment Tool to skip reading that particular file. Such repeated occurrences in single run could result in low volume data size in deduplication assessment report.

We recommend another run of the Backup Exec Deduplication Assessment Tool to address the issue.

31. Is there a help system available within the Backup Exec Deduplication Assessment Tool?

You can find the short-cut for help at top-right corner of each window with icon  within the Backup Exec Deduplication Assessment Tool. The help content is presented within your web browser.



Front-end Capacity Analysis Tool FAQ

1. I'm having trouble finding the Front-end Capacity Analysis Tool in the Backup Exec Deduplication Assessment Tool. Where is it located?

The Front-end Capacity Analysis Tool features currently exist as a sub-feature of the Backup Exec Deduplication Assessment Tool. As servers and their associated volume resources are selected in the Deduplication Assessment Tool wizard, the front-end capacity of each volume is calculated and displayed in the interface.

2. What does the Front-end Capacity Analysis Tool do exactly?

The Front-end Capacity Analysis Tool queries Windows volumes on selected servers and calculates the amount of front-end data on each volume. Front-end capacity information is displayed in the user interface itself, and can be viewed for the global environment in the form of a report. The report can be saved to a file if desired. Front-end capacity information can be used to understand how many licenses of the Backup Exec Capacity Edition would be required to protect an environment.

3. Do I need to run the Front-end Capacity Analysis Tool separately on each server I want to scan?

No. The Front-end Capacity Tool can be run on one individual server or laptop, and additional remote servers available on the network can be selected for front-end capacity assessment.

4. Do I need to take my servers or applications offline before running the Front-end Capacity Analysis Tool?

No. Front-end capacity results can be generated with near-zero impact on selected servers.

5. What performance impact will the Front-end Capacity Analysis Tool have on the servers in my environment?

Front-end capacity results can be generated with near-zero impact on selected servers.

6. How long will it take the Front-end Capacity Analysis Tool to scan my environment?

The generation of front-end capacity results takes minutes or less to complete, depending largely on the number of servers targeted for front-end capacity assessment.

7. Does the Front-end Capacity Analysis Tool deploy a software package to the servers I select for front-end capacity assessment?

Yes. A small temporary agent is deployed to each server selected for front-end capacity analysis. This agent is automatically removed after all tool-kit assessment processes have been completed.

8. Will the Front-end Capacity Analysis Tool tell me how many licenses of the Backup Exec Capacity Edition I need to protect my environment?

The Front-end Capacity Analysis Tool will generate a total or "global" front-end capacity for an environment, meaning all servers selected for assessment, as well generate results on a per server basis. These results allow the user to view the total front-end capacity for all the servers scanned, as well as the front-end capacity of each individual server. This data can be easily used to determine how many Backup Exec Capacity Edition licenses would be required to protect the target environment. The Front-end Capacity Analysis Tool does not directly display or offer a result that describes the number of Backup Exec Capacity Edition licenses required for an environment.

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Additional Resources

Link	Description
https://partnernet.symantec.com/Partnercontent/Product/BEDAT.jsp	Deduplication Assessment Tool Download
http://www.symantec.com/business/support/index?page=home	Enterprise Support Portal
www.symantec.com/business/backup-exec-for-windows-servers	Backup Exec Family Landing Page
www.symantec.com/business/products/whitepapers.jsp?pcid=pcat_business_cont&pvid=57_1	White Papers, Datasheets, Solution Briefs
http://support.veritas.com/docs/304175	Using Backup Exec in Large Environments
www.backupexec.com/compatibility	Compatibility Documentation
www.backupexec.com/skugenerator	SKU Generator and BEST Tool
http://www.symantec.com/docs/TECH172473	Private Cloud Services Calculator
http://www.symantec.com/docs/TECH172464	Private Cloud Services Documentation