Backup Exec
Deduplication Assessment Tool
Troubleshooting Guide

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.
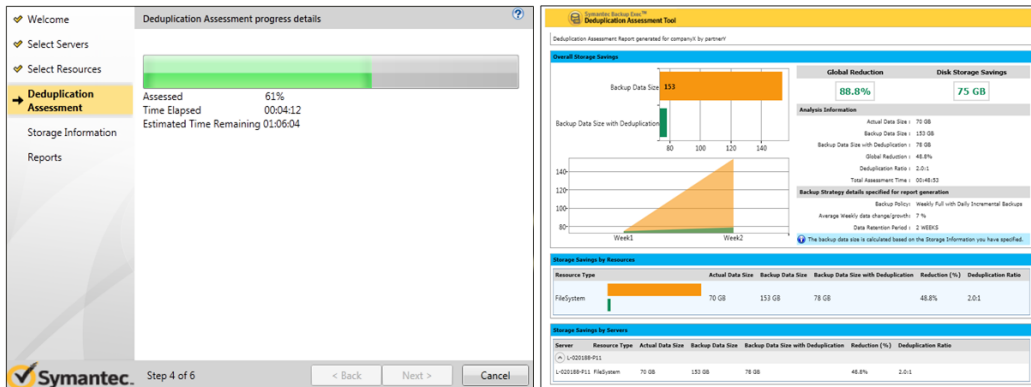

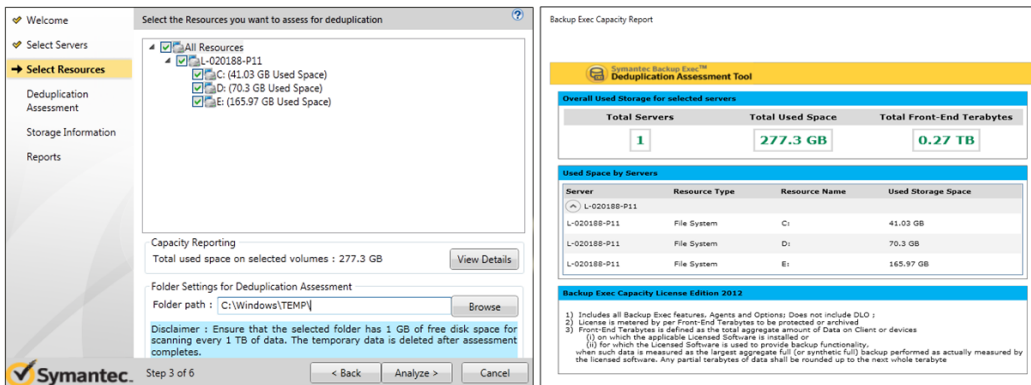*Figure 1: Deduplication Assessment Screenshots*

Figure 2: Front-end Capacity Analysis Screenshots

This Troubleshooting Document

This troubleshooting document is designed to allow partners and customers to easily diagnose and troubleshoot common errors around the Backup Exec Deduplication Assessment Tool.

Contents

Deduplication Assessment Tool Prerequisites

Before running the Backup Deduplication Assessment tool, it is advisable to check and confirm that the following components are present on the system:

1. Microsoft .NET Framework 4.0.

The Backup Deduplication Assessment tool requires Microsoft .NET framework 4.0 to be installed on the computer on which it is run. The Microsoft .NET framework is available for download at the following location:
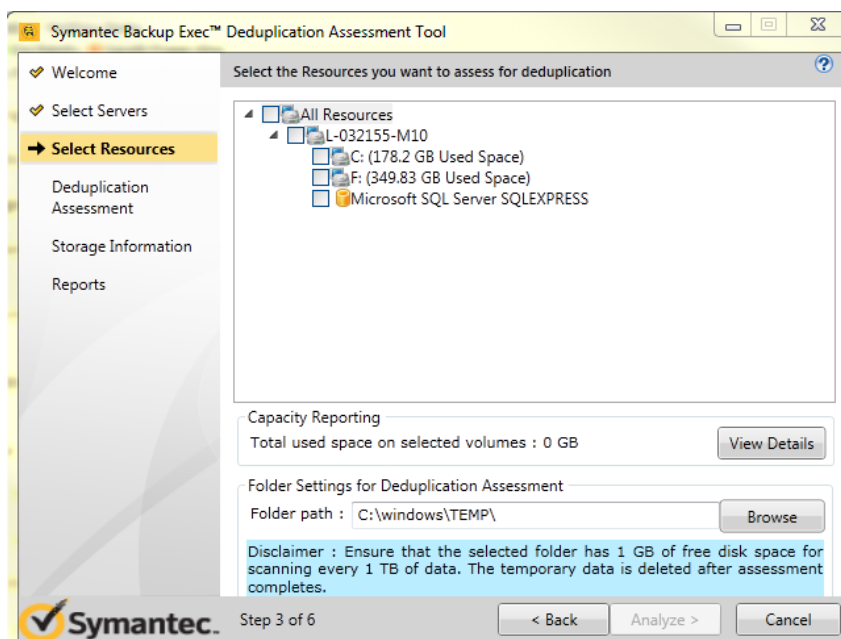
http://www.microsoft.com/en-us/download/details.aspx?id=17851

2. Administrator Privileges

The Backup Exec Deduplication Assessment tool requires Administrator credentials in order to scan the servers selected for deduplication assessment or front-end capacity analysis. You can run the tool using local administrator or domain administrator credentials.

3. Temp/Free Space on Local Disk

The Backup Exec Deduplication Assessment tool requires 1GB of free space for every 1TB of data scanned. The free space is required on all the servers selected for deduplication assessment. A temporary folder location is used by the tool to generate assessment data, which is deleted once the scan completes. By default, the Backup Exec Deduplication Assessment tool will use the '%systemroot%\windows\temp' directory for this purpose. You can change this directory before the scan runs from the resource selection screen and place it on drive with maximum free space. This can avoid failures due to lack of free space.

4. Memory (Physical RAM)
Although the Backup Exec Deduplication Assessment Tool itself is a small, light weight utility, it is recommended to have a minimum of 1GB of physical memory available in order for the tool to run efficiently.

5. Processor
For optimal performance, it is recommended to run the Backup Exec Deduplication Assessment Tool from a system that has at least a dual core CPU or higher.

6. Installation Disk Space
The Backup Deduplication Assessment tool requires approximately 50MB of disk space when downloaded and extracted. However, additional free space may be required. Refer to item #3 above for more information on temporary space requirements during Backup Exec Deduplication Assessment Tool scans.

7. Port Availability

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. For the self update feature to work, port 21 (FTP) needs to be opened on the firewall. Please be advised that port 21 is not required for scan operations; it is only used to check for the latest tool update from Symantec's secured FTP infrastructure.

8. Service Dependency

The Backup Exec Deduplication Assessment tool depends on few Microsoft services to be available and running in order to function properly. You need to ensure following services are set to automatic mode and are in running state before executing the Backup Exec Deduplication tool:

- RPC (Remote Procedure Call)
- WMI (Windows Management Instrumentation)
- Computer Browser

9. Locale Parameter

In order to run the Backup Exec Deduplication Assessment tool on non-English Windows operating systems, please set locale parameters to English (United States).

10. Microsoft VSS Writer Status

Time-out errors can occur in volume shadow copy service writers, resulting in lost shadow copies during scans or during instances of high input/output activity. VSS Writer status needs to be stable for BEDAT to scan and generate report.

If there is a problem with VSS writer then BEDAT may be unable to gather required information and 0 (zero) data size will be displayed in the report. Before running BEDAT, run "**Vssadmin list writers"** from the command prompt. A list of all installed VSS writers will be returned. Unless you are currently taking a snapshot, all VSS writers in the list should show a status of Stable.

Debugging the Backup Exec Deduplication Assessment Tool

The Backup Exec Deduplication tool is designed to be simple and easy to use. However, environmental conditions may inhibit the tool's ability to run and complete deduplication scans successfully. If an error or anomalous condition is present that is not covered in the list of prerequisites above, a debug log will be required by Symantec in order to find the root cause of the issue.

Follow the steps given below to enable the Backup Exec Deduplication Assessment tool's verbose debugging mode and contact us at DL-SYMC-Backup-Exec-TFE@symantec.com for further assistance.

1. Create a file named BEDAT.ini in the %systemroot%\Temp location before you run the tool
2. Execute the tool again
3. Add the servers for which the scan failed
4. Select the required resources *(Note the location of the deduplication folder location; by default it is located at '%systemroot%\temp' but can be changed by the user)*
5. Let the scan complete
6. Once the tool execution completes, copy the following folders:
    a. '%systemroot%\temp\BEDAT_LOGS'
    b. '%systemroot%\temp\<random_numbers>' *(For example: 'C:\temp\123456789')*
7. Zip the log folders and get in touch with us at DL-SYMC-Backup-Exec-TFE@symantec.com

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**