

Fix Tool (EV-6157) for Director 8.00 Vaults

Instructions

**EVault<sup>®</sup>**  
from Carbonite

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Acknowledgements: Two encryption methods, DES and TripleDES, include cryptographic software written by Eric Young. The Windows versions of these algorithms also include software written by Tim Hudson. Bruce Schneier designed Blowfish encryption.

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The EVault Software Agent, EVault Software CentralControl, and EVault Software Director applications have the encryption option of AES (Advanced Encryption Standard). Advanced Encryption Standard algorithm (named Rijndael, pronounced “Rain Doll”) was developed by cryptographers Dr. Joan Daemen and Dr. Vincent Rijmen. This algorithm was chosen by the National Institute of Standards and Technology (NIST) of the U.S. Department of Commerce to be the new Federal Information Processing Standard (FIPS).

The EVault Software Agents and EVault Software Director applications also have the added security feature of an over the wire encryption method.

## Introduction

This document describes how to resolve problems with deferred backups (issue EV-6157) using the fix tool for Director 8.00 vaults.

## Issue description

In rare cases, problems can occur when maintenance processes run on deferred backups from a small subset of Agent versions.

A three-step process has been provided for addressing this issue:

1. Upgrade Director to version 8.00h to prevent problems with subsequent deferred backups.
2. Run the scan tool provided for Director 8.00h vaults. The scan tool identifies tasks that are at risk of problems with deferred backups, and prevents maintenance processes from running on these tasks. For more information, see the scan tool instructions.
3. Run the fix tool provided for Director 8.00h vaults. The fix tool processes tasks that might have problems with deferred backups (identified by the scan tool in Step #2), determines which tasks actually have problems, and fixes problems as required.

*WARNING:* Do not run the scan tool again after running the fix tool.

*WARNING:* Do not run the vvarchive command on any task until it has been verified as “Safe” by the fix tool. Disable any scheduled tasks that might launch the vvarchive command.

## Fix tool description

The fix tool is provided in a .zip file named `FixTool_EV-6157_8.00h.zip`. This .zip file contains a `FixTool` folder that includes:

- the fix tool batch file: `FixTool-EV-6157.bat`
- a `VVPoolOp.exe` version for the fix tool
- .dll files required by the fix tool

When you run the fix tool on a vault, the fix tool skips tasks that the scan tool already marked as “Safe”. The fix tool only processes tasks that the scan tool marked as “AtRisk” of problems with deferred backups.

For each task marked as “AtRisk”, the fix tool determines whether the task actually has problems with deferred backups. If a task does not have problems, the fix tool re-enables maintenance processes on the task.

If a task has problems, the fix tool attempts to fix the data. If the tool fixes data for the task, it re-enables maintenance processes on the task. If the tool cannot fix data for the task, maintenance processes remain disabled on the task.

When you run the fix tool on a vault, the tool creates the following files:

- `fix_output.csv` — This file shows the total number of tasks in the vault, and indicates whether each task was skipped by the fix tool, was verified as safe, was repaired, or could not be repaired. The file is saved in the folder where the fix tool runs.

The first line of the `fix_output.csv` file shows the total number of tasks in the vault and the date and time when the fix tool ran. This summary line has the following format:

```
"vaultIdentifier(GUID)","vaultSystemName","__NumberOfTasksInVault","numberOfTasksInVault",  
,"mmm-dd-yy-hh-mm-ss"
```

*Note:* If you run the fix tool more than once on a vault, the summary line could appear more than once in the `fix_output.csv` file. For more information, see the [Fix\\_UnknownTasks.txt](#) file description.

The remaining lines in the `fix_output.csv` file list each task in the vault and show the fix tool result for each task. Each line has the following format:

```
"vaultIdentifier(GUID)","vaultSystemName","customerName","location","computerName",  
,"taskName","fixToolResult","[OfflineDataDetected]" [, "safesetNumber","fileName"]
```

The `fixToolResult` value indicates whether the task data is safe or requires more attention. For more information, see [Run the fix tool](#).

If `OfflineDataDetected` appears for a task, the task was marked as “AtRisk” by the scan tool, but some data for the task is offline and could not be processed by the fix tool. For more information, see [Run the fix tool](#).

If the fix tool could not fix a task, the following information appears for the task:  
`, "safesetNumber", "fileName"`

- `Fix_UnknownTasks.txt` — This file lists tasks that the fix tool has not processed. A task might not be scanned if it is locked (e.g., if a backup is running) when the fix tool runs.

When the fix tool runs, it first checks whether a `Fix_UnknownTasks.txt` file exists. If a `Fix_UnknownTasks.txt` file exists and includes task names, the fix tool only processes the tasks listed in the `Fix_UnknownTasks.txt` file. The fix tool then appends another summary line to the `fix_output.csv` file that shows the total number of tasks in the vault and the date and time when the fix tool ran. The fix tool also appends a line in the `fix_output.csv` file for each task that it processes.

- `Repair EV-6157-xxxxxxx-xxxx-xxxx.log` — This log file lists each task in the vault and describes the fix tool result for each task. The file is saved in the `Director\logs` folder. `xxxxxxx-xxxx-xxxx` is a random GUID, and does not represent the vault GUID.

## Run the fix tool

Before running the fix tool:

- Upgrade Director to version 8.00h.
- Run the scan tool to identify tasks that might have problems with deferred backups, as described in the scan tool instructions.

If possible, run the fix tool on the Active vault before the Passive vault in a 1:1 replication scenario.

To run the fix tool:

1. On the machine running Director, create a new, empty folder (e.g., C:\EV-6157-FixTool). Extract the `FixTool_EV-6157_8.00h.zip` file into the new folder. **If files are overwritten in the \Director\prog folder, the currently installed version of Director will break.**
2. Navigate to the folder where you extracted the fix tool .zip file, and run the fix tool batch file as an administrator: `FixTool-EV-6157.bat`

When the tool finishes, output files (i.e., `fix_output.csv` and `Fix_UnknownTasks.txt`) are available in the folder where you extracted the fix tool .zip file and ran the fix tool.

3. In Microsoft Excel or another spreadsheet program, open the `fix_output.csv` file, located in the folder where the fix tool ran.

View the *fixToolResult* for each task. The *fixToolResult* indicates whether the task data is safe or requires more attention, as described in the following table:

Fix tool result	Description
Skipped	The task does not have problems with deferred backups.
Verified Safe	The task does not have problems with deferred backups.
Repaired	The task does not have problems with deferred backups.
Disabled	The fix tool could not process the task because the task is disabled. Enable the task and run the fix tool again.
Incomplete	The fix tool could not process the task because last safeset contains an incomplete deferred file.
SUSPECT	The fix tool could not process the task because the task is marked as Suspect. Contact Support for assistance.
FAILED	The fix tool could not fix the task, and marked the task as Suspect. Contact Support for assistance.

If `OfflineDataDetected` appears for a task, the task was marked as "AtRisk" by the scan tool, but some data for the task is offline (e.g., archived or in detached secondary storage). If you want to fix these safesets, bring the safesets online and run the fix tool again.

If the *fixToolResult* for a task is `FAILED`, the following information appears for the task:  
`, "safesetNumber", "fileName"`

4. Open the `Fix_UnknownTasks.txt` file, located in the folder where the fix tool ran.

If any tasks are listed in the `Fix_UnknownTasks.txt` file, run the fix tool again to process these tasks.

If the `Fix_UnknownTasks.txt` file is blank, and all tasks in the `fix_output.csv` file are marked as `Skipped`, `Verified Safe`, or `Repaired`, tasks in the vault do not have problems with deferred backups and you do not have to run the fix tool again.