README
Tivoli Continuous Data Protections for Files, Version 3.1.6
December 11, 2009

Abstract

This document outlines the APAR and defect fixes contained in Tivoli Continuous Data Protection for Files Version 3.1.6.0. It contains information on product enhancements and defect fixes made since the initial release, version 3.1.

Release/FixPack History		
Release/FixPack	Date	FixPack Version #
6	December 11, 2009	3.1.6
5	June 23, 2009	3.1.5
4	September 26, 2008	3.1.4
3	March 27, 2008	3.1.3
2	October 3, 2007	3.1.2
1	August 17, 2007	3.1.1
Release CDP Starter Edition	**May 25, 2007**	**3.1**
Release CDP Full Edition	**April 27, 2007**	**3.1**
2	April 7, 2007	2.2.1.22
1	September 29, 2006	2.2.1
Release	**June 16, 2006**	**2.2**
3	March 17, 2006	2.1.3
2	December 14, 2005	2.1.2
1	September 14, 2005	2.1.0.1
Release	**September 2005**	**2.1**

CDP v3.1.6.0, December 2009
New Platform Support since last Fixpack
  Microsoft Windows 7 Starter Edition (32 bit)
  Microsoft Windows 7 Home Premium (64 bit)

Fixes/Improvements/Limitations
<u>APAR Fixes</u>
IC62003 – CDP hangs when using compression with email backup. Proper backups now occur on email files that are greater than their subfile minimum size.

IC63477 - Files will not be stored correctly by CDP if the machine name contains "-fp". Files will now be stored correctly.

IC64824 - Initial scan on CDP backup may skip files/directories. CDP no longer skips files/directories when doing an initial scan of the machine.

<u>Defect Fixes</u>
Fixed the exception popup message when going into the Restore screen and hitting the "Next" button quickly.

Fixed errors when putting *.* in the vault list.

Fixed the infinite error loop when the USB target runs out of space.

Fixed folder names that have -FP in them so they are not truncated in the restore view.

Fixed file names that have "-FP" in them so they are backed up and restored properly.

Fixed the transfer error while the files are backing up.

Fixed the My Documents & Desktop folder empty in restore view.

Fixed the user interface to display the correct storage metrics.

Fixed the version display issue in the restore files table.

Fixed the maximum CPU usage that was produced by a restore error.

Fixed the user interface so when you uncheck one application it does not uncheck others.

Fixed the application search function to display all files that were backed up using encryption or compression.

<u>Improvements</u>
Added *INITIAL_BACKUP_COMPLETED* message in log after last initial backup.

The <report/> command will no longer sends empty reports to BackupAdmins\Reports directory.

Modified the Notes password prompt message to be clearer.

Modified the systray pop-up message to tell users to check System Event and Application logs.

Reduced the full email backup occurrences which will help with performance.

Changed the Kbs to Kbps.

Added "please wait" to restore screen file browser.

Added a message during the restore process to close applications before a file is restored.

A message is now logged to the system event log when the scheduled backup is aborted by the user.

Added a check to ensure the configuration database, fpa.txt is configured before passing commands.

CDP will no longer attempt to set end-of-file on Attribute changes for Read only files. This eliminates the "set end of file" error users were seeing in the activity log.

Increased isDatabaseConfigured timeout.

Reduced the stack usage in sync command.

New Commands in CLI
A new CDP command is available from the command line;
"get-updates" command. The "get-updates" command is used to force the client to immediately check for new updates from the downloads directory.

Refer to the following link for details regarding the CDP Command Line Interface.
http://www-01.ibm.com/support/docview.wss?rs=2339&context=SS3PE6&dc=DB560&dc=DB520&uid=swg21299194&loc=en_US&cs=utf-8&lang=en

Limitations

Open File Support
Microsoft Windows Explorer's Compressed Folders (.zip) feature
Quickbooks
Refer to technote for details and workaround: http://www-01.ibm.com/support/docview.wss?rs=2339&context=SS3PE6&dc=DB560&dc=DB520&uid=swg21411522&loc=en_US&cs=utf-8&lang=en

Workstations backing up to a TSM Server
When using a Tivoli Storage Manager Server as a CDP backup target, the CDP password prompt keeps popping up if the User account on the machine does not have administrative privileges. The reason is because Tivoli Storage Manager needs full access to every key in the following registry path in order to save the password:
HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ADSM
This only applies to users in the users group on Windows XP, Windows Vista and Windows 7, and users in the administrator groups on Windows Vista and Windows 7.
To fix the problem, use regedit to grant full access to the user running FastBack for Workstations. Full access must be granted to the following keys:
HKEY_LOCAL_MACHINE\SOFTWARE
HKEY_LOCAL_MACHINE\SOFTWARE\IBM
HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ADSM

CDP's Lotus Notes E-mail backup feature is not supported on Windows 7 and Windows x64 installations of CDP. This is because Lotus Notes does not support those platforms.

Known Issues
You MUST close the CDP GUI prior to installing over an existing install, pulling an install from the server, and setting up CDP to run as a service. If you do not close the CDP GUI, you will receive a 'FPA_getNamedObject: could not find:<rule name="Group 1" pop-up message. Click OK on the message window and close the CDP GUI.

The email link on the Status Page brings up the Advance settings tab. To get to the email page, please click on the email tab.

During a restore on 64-bit operating systems, you will not receive a restore confirmation message although your file restore will be successful.

CDP v3.1.5.0, June 2009
Fixes/Improvements/Limitations
<ins>**APAR Fixes**</ins>
IC60954 - When CDP for Files 3.1 is installed together with Trend Micro Office Scan 8 the user can experience times when the computer will perform slowly or not function at all.

IC59353 - Files in renamed directories may not be backed up using encryption or compression.

IC59211 - CDP fails to restore files from fileserver when machine name is in Chinese or other supported multi byte languages.

IC59102 - When using a 2003 server as the remote location and the server is shutdown, files saved on the client 2003 machine does not get back a restartable error. As a result, the files are not backed up when the server is restarted.

IC58904 - CDP does not backup Lotus Notes files that are opened using inconsistent case.

<ins>**Defect Fixes**</ins>

Fixed memory leak when opening compressed files.

Files containing non-default NTFS streams can now be backed up with encryption disabled.

Added a check to remove the utf encoding chars at the front of fpa.txt (this makes editing using notepad's utf-8 mode easier).

Fixed extinfo.exe crash.

Fixed initial scan so that it does not bypass every other disk.

Fixed the Browse button when CDP is configured as a service.

Fixed CDP hang after restarting an initial backup scan.

Fixed the CDP UI Report view text so that all text is displayed.

Fixed restore page problem so that all files are displayed in the list view.

Fixed browser resize problem during a backup.

Fixed the Internet Explorer error when displayed in the Advanced tab.

Fixed abort queue so that it aborts only the active queue.

Fixed the status bar overflows when using Internet Explorer 6.

Fixed duplicate files displaying in the Files table.

When an error was returned while backing up to an email backup CDP used to create a new file that was not tracked along with the other email versions. This meant that more than the set version of email files would be kept. Communication errors no longer lead to this circumstance, however errors in the bitmap logic and in the Notes API could still result in this situation.

Fixed email backup so that it does not fail when compression is enabled.

<ins>**Improvements**</ins>

When an email backup was made while the email file was opened by the email client the next backup frequently resulted in an unnecessary full backup. Improvements have been made to reduce occurrences of full backups made while Lotus Notes is open.

Fixed multiple full versions of email files not getting expunged causing more than the set number of email versions to be kept. Improvements have been made to reduce occurrences when there are more files than the set setting allows.

Known Issues and Limitations

Fixed CDP hang when backing up on top of a compressed file. (Fixed in v3.1.5.1)

Intermittently the subfile copy option in the remote storage panel backs up the entire file, rather than just the changed portions.

The reports concerning scheduled backup does not always show the correct information when files fail to backup.

The Vault option in the Files to Protect panel only works if a file is created via command line. If a user drags and drops a file using explorer, or uses copy and paste, the file will not be protected from deletion.

If a user created a large number of files (in the thousands) in a directory that has been added to Files to Protect panel include list, only some of the files are shown in the Restore panel of the CDP GUI.

CDP v3.1.4.0, September 2008
New Platform Support since last Fixpack
Microsoft Windows Vista Ultimate 64-Bit Edition, including SP1
Microsoft Windows XP, including SP3

Fixes/Improvements/Limitations
APAR Fixes
IC56168\IC56140 - CDP fails to create folder for hard drive under realtimebackup

IC56230 - CDP does not backup documents saved by word 2000 to a network

IC57117 – CDP for files documentation unclear about sub-file, encryption, and compression usage if file replication sent to TSM

IC57118 - CDP for files may cause media wait sessions during replication to a TSM remote location

IC57351 - CDP 3.1 driver load failure on Windows Vista

IC57353 - CDP 3.1 "E-mail application data folder" setting does not behave as expected when a drive letter is used.

IC57609 - CDP is unable to restore files from the top level of the restore tree

IC57849 - CDP for Files pops a systray message stating CDP for files encountered an error and the diagnostic messages are in English.

IC57910 - CDP 3.1.3.0 can blue screen when an application opens and closes a file

Defect Fixes
When CDP encryption is on backup errors get logged after backing up a zero length file to a WebDAV apache server.

If a non-versioned base file is present then E-mail backups can stop.

Drive letters can now be used in the "E-mail Application Data Folder" setting on the "E-mail Protection notebook page.

Files under a read-only directory do not get backed up and an error 6086 is logged in replication.log. This problem can happen frequently in Windows Vista installation where the Users directory can have the read-only apptribute on by default.

Restore file view top folder broken. The top folder in the restore file tree view does not function properly. It does not automatically uncheck in some cases. If checked, it does not get added to the file table for restoring.

The CDP tray icon does not automatically return if Windows Explorer crashes.

The pull install for x64 and x86 behavior has changed. A CDP client running on Windows x64 will only pull down and install executables from the download directory if they have the string "x64" somewhere in their name. CDP clients running on Windows x86 will ignore any install executables that contain the string "x64". If older x86 clients that do not have this change download and attempt to install the x64 code then the user will see a popup indicating that new software is installing but the installer actually skips installing the software because it is being installed on a platform it was not designed for. This attempt is benign and does not alter the CDP installation currently on the machine.

At times, when pressing a "Browse" button in the CDP gui the Browse dialog box will appear behind CDP's gui window. This fix tries to solve that by signaling the window to go infront of the browser.

The Restore Folder View can sometimes show files in a directory that actually belong in another directory.

Changes were made to make the XML backup reports compliant with the XML standard.

<u>Minor Enhancements</u>
Microsoft's SMS can now be used to install CDP on Windows Vista.

The creation time is now set to be the same value as the source file when files are backed up to a fileserver target.

In the Folder View deleted files are now indicated by a file icon with red x through it. This indication only applies to file backed up to the remote storage location. Deleted files in the local pool are not indicated.

Initial backup started either by the configuration wizard or by using the "Files To Protect" notebook page in the CDP gui will no longer be terminated when the computer reboots. After a reboot the initial backup will resume scanning at the point where it last left off.

FireFox 3 has been tested and is supported and compatible with CDP.

Initial scan reporting functionality has been added. This helps administrators determine if an Initial Scan completes successfully by looking at reports on the server. There are two new reports, Scan.log and ScanFinish.log. These files will contain xml formatting and a time stamp when the Initial Scan started and finished respectively.

An example of the output for the Scan.log is:
```
<?xml version="1.0"?>
<Scan-Started>
<Initial Scan time="2008-09-22_10.59.40" />
</Scan-Started>
```

An example of the output for the ScanFinished.log is:
```
<?xml version="1.0"?>
<Scan-Finished>
<Initial Scan time="2008-09-22_11.02.28" />
</Scan-Finished>
```

The reports are found in the Report directory for the respective client machine on the remote server. An example location:
\\"FILESERVER"\"SHARE"\RealTimeBackup\"MACHINENAME"\BackupAdmin\Reports

<u>New Commands</u>
There are two new CDP commands available from the command line. They are:
- "purge-file" command. The "purge-file" command is used to delete a file or folder on the remote storage location updating metrics as needed.
- "sync" command. The "sync" command is used to recover from situations when CDP,s metrics do not accurately reflect the files that are on the remote storage location.

Refer to the CDP Tech Note #1299194 "CDP v3.1.3, Command Line Interface User Documentation" for details.

Limitations

When running CDP on a Windows x64 machine, the CDP password prompt keeps popping up when using a Tivoli Storage Manager server as a CDP backup target:

  Tivoli Storage Manager needs full access to every key in the following path in order to save the password.
      HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ADSM

  To fix the problem, use regedit to grant full access to the user running CDP. Full access must be granted to the following keys:
      HKEY_LOCAL_MACHINE\SOFTWARE
      HKEY_LOCAL_MACHINE\SOFTWARE\IBM
      HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ADSM

CDP's Lotus Notes E-mail backup feature is not supported on Windows x64 installations of CDP. This is because Lotus Notes is not supported on the x64 platform.

CDP v3.1.3.0, March 2008
New Platform Support since last Fixpack
Microsoft Windows Server 2008 Enterprise 32-bit, service pack 1 v. 126
Microsoft Windows Vista Basic
Microsoft Windows Vista Home Premium
Microsoft Windows Vista Enterprise, including SP1
FDCC settings toleration support (Windows XP Professional & Windows Vista Enterprise)

Fixes/Improvements/Limitations
APAR Fixes
IC55325- CDP client is unable to expand directories of displayed files in the "folder view" on restore.

IC55323- CDP restore GUI interface may show multiple overlapping windows.

IC54792- CDP fpa.txt file on target system is not updated correctly for continuous protection, when changing the protection level.

IC54486- CDP GUI opens in an existing web browser window rather than in a new web browser window.

IC54485- CDP GUI is slow when displaying folders that contain a large number of objects.

IC54425- Date stamp does not display correctly when v3.1.2 is run on Italian XP.

IC54272- When doing an install with an fpa.txt in the system32 directory on a vista machine results in the fpa.txt getting virtualized.

IC54264- Security concerns with central admin global download directory and remote global download directory. Refer to the technote on the CDP Support site for details.

IC54200- File created or changed while a TSM node is locked do not get backed up.

IC54093- CDP's filepathsrv.exe process can crash after logging into windows when the remote target is a USB drive.

Defect Fixes

CDP configuration wizard has intermittent problem upon install. Fixed the CDP configuration wizard so that it comes up after CDP is installed on a new machine.

Drag and Drop or a rename does not get backed up. Moving directories from ones that are not included by any CDP rules to ones that are, will now trigger the directory to be backed up. Renaming a directory will also cause the directory to be backed up.
This fix addresses this issue.

CDP doesn't retry backup after login permitted, FDCC settings. If the Windows fileserver that CDP backs up files to only allows an account to log on at certain times of the day, CDP will wait to backup files until a time that access is permitted. This fix addresses this issue.

CDP skips files saved from Word 2000 to Windows 2000 Server. When CDP is running on a Windows 2000 fileserver and Word 2000 is used to save a document to a share on that server, then CDP will miss backing up the file. The fix only applies to Windows 2000 and it is only active on Windows 2000.

Run CDP replication threads at a lower priority. During CDP's initial backup, other applications running on a computer can sometimes be unresponsive. This fix will allow CDP to run threads doing backups in the background so other applications will be more responsive.

CDP's filepathsrv.exe process can crash after logging into windows. When a volume mount point that points to a USB drive is used for CDP's remote backup location, FilePathSrv.exe can crash at login time when the USB drive is not plugged in. This fix addresses this issue.

Encryption mode mis-match logged during .nsf backup. If the data changes during the initial base backup of a Lotus Notes database and encryption is on then the following error will be logged:
        ENC ERR Encryption mode:1 mis-match with EncryptDecryptStart:0
This fix addresses this issue.

Potential corruption in Notes backups. When changes are made to a Notes database during a backup, the Notes API will tell CDP about the blocks that have changed. If the datablock containing the changed data contains a null character, then only the data up to and including the first null, is backed up. The remainder of the block contains uninitialized data instead of the data that it supposed to contain. This led to corrupt backups that will typically crash Notes when it attempts to open them. This fix addresses this issue.

TSM .pwd file not named properly. The file containing the password for a TSM server should be named after the name of the tsm server. Due to this defect, only the first character from the server name is used. This fix addresses this issue.

Remove error message when doing a backup with sub file to IIS5. When CDP 3.1.2.13 or 3.1.2.3 backups to a webdav server, it may log multiple "invalid match_doctypedecl" in the error log. This fix addresses this issue.

CDP needs to handle DSM_RC_NO_PASS_FILE for 5.5 support. This change is necessary if CDP is being used with the TSM 5.5 API or when backing up to a TSM 5.5 server. If the change is not applied, then CDP will post errors in the log instead of prompting for a password when the node password is reset. This fix addresses this issue.

File created or changed while a tsm node is locked do not get backed-up. When a TSM administrator locks out a CDP node using the LOCK NODE command, any new files that are created or changed while the node is locked, do not get backed up. Instead CDP will log an error and skip the file. Now CDP will wait until the node is unlocked.

9

Make ERROR_SEM_TIMEOUT restartable. If CDP is setup to backup to a "SanDisk Cruzer Enterprise" USB key, then certain file changes made while the key is unplugged will be skipped due to an error. This fix allows CDP to retry and wait until the USB key is available for storing the backup.

More than 1/2 delta sends entire file on Windows 2008. CDP Email backup is designed for use with the large database-like files that email clients tend to produce. CDP's email backup should not be configured to backup files generated by applications like Microsoft Word. Applications like Microsoft Word and Email applications are different. Email applications typically open a file, make modifications to it, then closes it.

Microsoft Word replaces the entire file on every save so it always looks like the entire file changed. This means that backing up an application like Word using CDP's email backup feature is not appropriate. This fix addresses this issue.

Enhancements
FDCC settings toleration support. CDP v3.1.3 has been IBM certified to install and run on Windows XP Professional and Windows Vista Enterprise with FDCC settings enabled.

Known Issues and Limitations
CDP will fail to save files on the remote server when a directory or subdirectory in the files full path is "Read Only".

Email backup does not work on Internet Information Server.

Encryption does not work on Internet Information Server.

CDP v3.1.2.0, October 2007
APAR Fixes
IC53779- When a Non-default Central Admin location is specified, the subdirectory for the CDP Client computer name is not created causing the global download area never to be looked at for updates. The client subdirectory is now created allowing the global download area to be checked for updates.

IC53814- CDP 3.1 not able to see all files/folders when doing a restore from a remote Webdav server. You can now restore all files/folders from a remote Webdav server.

IC53118- Transferring a pst file to a Webdav server. If the .pst file transfer is interrupted at any point, the file transfer will restart from the beginning of the file. This PTF fixes the Apache Server in CDP, but the CDP_APACHE_2.2.4_RESTARTABLE.patch must also be installed on the CDP client for the Apache Server to function correctly. Please contact support for a link to the CDP_APACHE_2.2.4_RESTARTABLE.patch.
***NOTE: The Apache patch is only necessary if you want to be able to restart the transfer from where it left off. If the Server is not patched, CDP will function normally in all regards except it will not be able to restart a transfer from where it left off.

Defect Fixes
Fixed the GUI to use utf-8 encoding.
Fixed the machine name substitution issue when publishing fpcommands.xml.
Fixed the Vista issue when the network is unplugged during the transfer of a file to a file server.
Fixed the default wait time of 5 minutes (Apache's default) to 8 minutes before restarting IO to an
    Apache server. CDP now waits for 8 minutes, so that apache does not delete the file during or after
    CDP resumes its transfer. NOTE: This does not apply to apache servers with the
    "CDP_APACHE_2.2.4_RESTARTABLE.patch" running on them.
Fixed email back-up on files that the timestamp hasn't changed on.
Fixed the Files To Restore list to not show a period at end of compressed file names.
Fixed the initial backup crash on Vista operating systems.
Fixed to now allow writes beyond the target length on a TSM target.

CDP v3.1.1.10, August 2007

APAR Fixes

IC52755- Encryption / Compression not supported on WebDav server. Support has been added for encryption to an Apache WebDav server.

IC52754- CDP for Files does not track the storage that is consumed by email backup copies. Email backups now get added to the server pool. There are 2 things to understand:
1. Email backups get added to the pool but, since they are always versions they do not appear in the gui's "Usage" bar.
2. The amount of space taken up by email backups will be considered when it comes time to purge but the actual purge function can only make space by deleting non-email files. In the event that email backups do not leave enough room for other types of backups the "Maximum space for backups: " can be adjusted manually.

IC53235- Email list truncated. Email include list is truncated with "..." if too long.

Defect Fixes

Improved Compatibility with 3rd Party Filesystem Filter Drivers.

Fixed problem where CDP would hang when backing up or restoring certain files that are greater than 4GB. This only happens with restoring certain files that were backed up with the sub-file backup method or during the backup or restore of files backed up using email backup.

Fixed Security problem that could allow an attacker to run arbitrary code on a machine running CDP. The CDP gui can no longer be accessed without a specific security token present in the url. This is to prevent the CDP UI from being run by unauthorized sources like malicious internet webpages. OEMs should read the OEM section concerning these changes.

Reduced number of full copies for email backups. When CDP queries for the filesize of a previous backup, it looks at the file on the server. When the previous backup was a delta backup, CDP was using an incorrect filesize to determine if a new delta backup or a complete backup should be made. This has been fixed and CDP now uses the size recorded in the delta backup.

Fix invalid date format.   pt_BR date format was incorrect.

Support for Notes backup API does not always install. If the user who installs CDP for files has a higher level of security access than the user who runs filepathsrv.exe then the COM component that CDP registers to communicate with the Notes API does not get installed.

This problem can happen on Vista or Windows XP/2000. It is more likely to happen on Vista.
On Windows XP/2000, it only happens if, for example, CDP is installed using an administrator account then a member of the "Users" or the "Power Users" group tries to backup a Lotus Notes file.

Add English Message to explain session expiration panel. When the user types in a url that does not contain a security token or uses a bookmark they created while using CDP 3.1 or earlier versions, they will see this message. The connection to the CDP GUI needs to be re-established. To do this, double-click on the CDP icon in the system tray or use the CDP short-cut under the Start Menu.

URLs without the security token embedded are no longer supported. Refer to defect 2561 for more information on this.

Note: This message is English only. All languages will see this message in English until the next major release of CDP for Files.

In the configuration wizard, warn user if no remote location specified. The CDP v3.1 configuration wizard can set e-mail protection and not set a remote storage destination. This causes CDP error #5053 NOENT when the scheduled time comes. This fix addresses this issue.

Progress not indicated when restoring email. When restoring an email file the progress is now displayed just as it is when restoring files backed up by other means.

Make winhttp error 12152 restartable. ERROR_WINHTTP_INVALID_SERVER_RESPONSE (error #12152), indicates that the web server reported back an http header to CDP that could not be parsed. This condition can happen for a number of reasons, but is sometimes transient. Because it can be transient, CDP has been changed to retry after this message is received.

It can happen in a number of circumstances some of which are not suited for the "restartable" error handling path.

If a webserver goes in and out of the "disconnected" state while retrying a transfer of the same file, Check the following...
- Is CDP able to transfer any files to the server?
- What kind of webserver is the customer using? Is it supported?
- Is the webserver server out of disk space (or quota)?
- Does the problem happen during shutdown or at the start of some period of time when the network was not available?
- Is there a network security appliances or software that requires a login between the CDP client and the webserver? Like our lab's BSO?

Improved performance of subfile backup. This change has been shown to increase subfile backup performance 200% when compared to the previous algorithm.

filepathsrv.exe crashes in during startup. In rare situations, filepathsrv.exe can crash during start while processing its messages file. This fix addresses this issue.

All network connectivity lost when using webdav. If multiple files are restored from a webdav server CDP can leave multiple outstanding file reads from the http server open indefinitely. This can lead to CDP reporting connectivity errors. In one case this made the machine running CDP unable to make connections to the network from any application to any server. This condition can also happen when using webdav and encryption. This fix addresses this issue.

If local pool not used, show number of files protected remotely. When "Continuous protection level" is set to remote only, the number of files protected was not displayed correctly. This fix addresses this issue.