Tableau Password Recovery USER GUIDE

Version 1.3



From beginning to endpoint.

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CHAPTER 1

OVERVIEW

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Overview

Tableau Password Recovery (TPR) recovers passwords of protected (encrypted) files, partitions, or entire drive volumes that are part of your case or investigation. It is an integrated solution that uses Passware Kit Forensic software and Tableau Accelerator 2 (TACC2) hardware on a dedicated system to unlock password protected files.

TPR can also integrate directly with EnCase Forensic, EnCase Basic, EnCase Endpoint Security, EnCase eDiscovery, and EnCase Endpoint Investigator. If your investigation includes a number of files that are password protected, you can send one or more of these files, or their entire Logical Evidence File (LEF), to the TPR server. After the passwords are recovered, the passwords are returned to your EnCase Examiner computer, where they can be viewed along with the original, encrypted files.

The TACC2 is an integrated circuit board that was purpose-built for accelerating password decryption algorithms. Using the TACC2 hardware, TPR can decrypt passwords hundreds of times faster than the process would take when using general purpose CPUs.

To further speed up the decryption process, you can add more TPR systems to your configuration. Each additional TPR increases the speed of decryption linearly.

Note: If you are updating your TPR or TPR cluster to version 1.3, <u>click here</u> to download the v1.3 installer and update instructions. To get full support for version 1.3, go to <u>www.passware.com</u> to update your licensed copy of PKF.

The Tableau Password Recovery System

TPR is a rack mountable system installed with a current version of Microsoft Windows, optimized for dedicated password recovery. The system is equipped with:

- Four TACC2 PCIe cards
- Intel[®] Xeon[®] Processor E5-1620 v3 3.5Ghz, 4 Core Processor
- 16 GB ECC RAM
- 256 GB SATA III SSD
- Intel Dual Gigabit Ethernet Network Adapter

The Tableau Password Recovery Software

The TPR solution involves multiple software components. The tables below describe the components used in two standard TPR configurations. The first configuration uses only TPR and Passware. The second configuration is where TPR and Passware are integrated with

EnCase.

Configuration 1: TPR and Passware

Component	Runs on	Function				
*Passware Kit Forensic	Examiner Computer	Provides the user interface to configure and start attacks on encrypted files. Communicates with the Passware agents on TPR systems to decrypt passwords. Retrieves unlocked files and recovered passwords.				
Passware Kit Agent	Each TPR system	Accepts jobs from Passware Kit Forensic on the Examiner com- puter. Uses TACC2 hardware on TPR to accelerate the decryption process.				

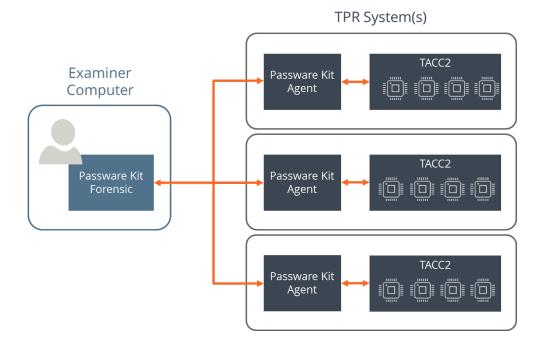
Configuration 2: TPR and Passware Integrated with EnCase

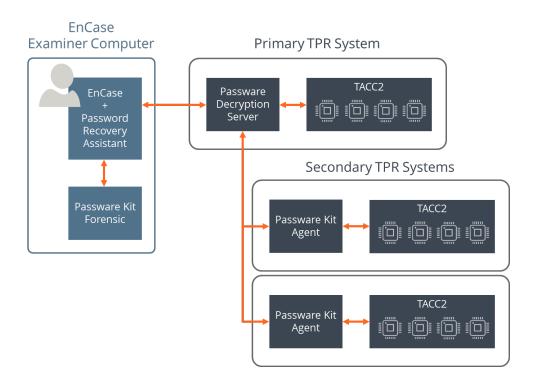
Component	Runs on	Function
Password Recovery Assistant	EnCase Examiner computer	Operates within EnCase. Provides the user interface to configure and start attacks on encrypted files. Communicates with the Passware Decryption Server to decrypt passwords. Retrieves unlocked files and recovered passwords.
*Passware Kit Forensic	EnCase Examiner computer	Provides Passware license information to the Password Recovery Assistant.
Passware Decryption Server	Primary TPR sys- tem	Acts as a proxy and communicates with the Password Recovery Assistant on the EnCase Examiner computer, and the Passware agents on secondary TPR systems to decrypt passwords.
Passware Kit Agent	Secondary TPR sys- tem	Accepts jobs from the Passware Decryption Server on the primary TPR system. Uses TACC2 hardware on TPR to accelerate the decryption process.

*You must purchase a Passware Kit Forensic license in addition to TPR if you do not already own a copy.

The following diagrams show the relationship between the components in each configuration.

Configuration #1: TPR + Passware





Configuration #2: TPR + Passware + EnCase

Supported File Types

TPR accelerates decryption for the following file types using TACC2 hardware:

- Android Image
- Apple FileVault 2
- Apple iOS Backup
- Apple OS X Keychain
- MS Office 2007, 2010, 2013, 2016
- PGP Disk 6
- PGP Self-Decrypting Archive (SDA)
- PGP Private Keyring
- PGP Whole Disk Encryption (WDE)
- RAR 3.x, 4.x, 5.x
- ZIP
- TrueCrypt

CHAPTER 2

INSTALLATION AND CONFIGURATION

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Overview

This chapter contains information on installing and configuring TPR. This includes installing and configuring some or all of the following components, depending on your desired configuration.

Refer to <u>The Tableau Password Recovery Software</u> for more information on the components used in the standard TPR configurations. This guide currently only describes how to configure and use TPR when TPR is integrated with EnCase.

- The TPR system
- Passware Kit Forensic
- Passware Decryption Server
- Password Recovery Assistant
- Passware Kit Agent

Product Licensing

Before installing the TPR system and software, you need to obtain the product license keys for Microsoft Windows and Passware.

Passware Kit Forensic License

Passware provides a product license key for Passware Kit Forensic via email. The license key is required to install Passware Kit Forensic.

If you cannot find your Passware Kit Forensic license, you can request a product key from Passware Support at <u>http://www.lostpassword.com/support/lost.htm</u>. Enter Passware Kit Forensic as your Product Name and enter the order number you received from the vendor (Guidance Software, Passware, or an authorized Passware reseller) as your Order Reference Number.

Microsoft Windows License

A current version of Microsoft Windows is preinstalled on the TPR system. During the initial boot you will be guided through the Windows setup process, which will require entry of the Windows product key. The Microsoft Windows license key is located on the back of the TPR LCD screen.

Installing the Tableau Password Recovery System

TPR should be installed by a systems administrator. The initial setup of TPR requires connection to a monitor and keyboard. To install the system:

- Install the server rack rails to the sides of the TPR system and mount it into a rack or cabinet.
- 2. Connect power, network, and a monitor and keyboard.
- 3. Power on TPR.
- 4. Follow the steps of the Windows setup procedure, during which you need to enter the Windows License Key.
- 5. Configure the TPR network settings according to the network requirements. TPR can operate using standard network configuration (such as a manual or dynamic IP address) and either a Microsoft workgroup or domain.

Activating the Windows License

A current version of Microsoft Windows is installed, but not activated on TPR. To activate the Windows product key:

- 1. Click the Windows Start button, right click This PC, and click Properties.
- 2. Under Windows activation, select Change product key.
- 3. Enter the product key.

Installation Files

Files for the installable TPR software components are located under C:\Windows\TPR\Installers on the TPR system.

The following table includes the installation program for each component.

Component	Installation Program			
Passware Kit Forensic	passware-kit-forensic-64bit.msi			
Passware Kit Agent	passware-kit-agent-64bit.msi			
Passware Decryption Server	passware-decryption-server-64bit.msi			
Passware Recovery Assistant	Tableau Password Recovery Assistant.exe			

Installing Passware Kit Forensic

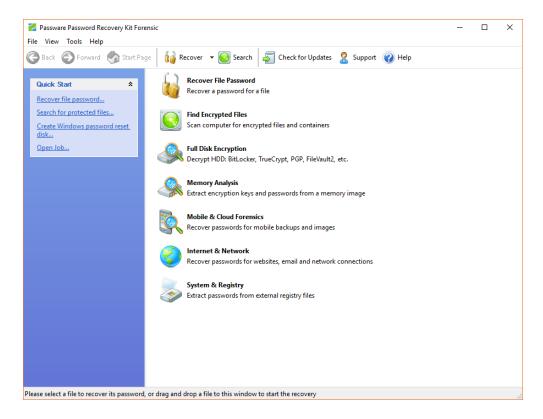
Install Passware Kit Forensic on the Examiner computer used to recover passwords. Each copy of Passware Kit Forensic requires its own license.

TO INSTALL PASSWARE KIT FORENSIC:

- 1. Copy passware-kit-forensic-64bit.msi to your Examiner computer.
- 2. On the Examiner computer, run passware-kit-forensic-64bit.msi.
- 3. When prompted, enter your Passware Kit Forensic product key to register the product.

🖟 Passware Kit Forensic 2016.4.0 Setup —		×
Passware Kit Forensic Registration		
Enter your product key to complete your installation.		\checkmark
Enter Passware Kit Forensic Product Key located in your order confirmation e-mail		
Product Key:		
1LSQT-9CJR5-LDMG8-KDIM4-LDKKF-SNFD3-82HYD-BVYH3		
Lost your Product Key?		
Back Next	Cano	cel

4. Click Next. When the installation completes, Passware Kit Forensic opens.



Note: The TACC acceleration units are not available until Passware Kit Forensic is running as administrator.

Installing the Passware Decryption Server

To integrate TPR with your EnCase workflow, install the Passware Decryption Server on your primary TPR system.

TO INSTALL THE PASSWARE DECRYPTION SERVER:

- 1. Create a Passware Decryption Server share folder and grant the Password Recovery Assistant access to it.
- 2. Install the Passware Decryption Server on the TPR.
- 3. Configure the Passware Decryption Server.

Creating a Passware Decryption Server Share Folder

TO CREATE A FOLDER THAT THE PASSWARE DECRYPTION SERVER AND THE PASSWORD RECOVERY ASSISTANT CAN SHARE:

- 1. On the TPR, create a folder, such as C: \DSShared.
- 2. Grant the EnCase user Read and Write access to the folder. To grant Share access using the Windows Sharing Wizard:
 - from Windows Explorer, right click the Passware Decryption Server folder you created and select Properties.

🏪 📝 📙 🖛 TPR-Win10 (C:)						-	
File Home Share View							~ 🕐
\leftarrow \rightarrow \checkmark \Uparrow \clubsuit \rightarrow This PC \rightarrow T	PR-Win10 (C:)	>			~ Ū	Search TPR-\	Win10 (C:) 🔎
🖈 Quick access	Name	^	Date modified	I	Туре	Size	
 Quick access OneDrive This PC Desktop Documents Downloads Music Pictures Videos Videos TPR-Win10 (C:) dsshared PerfLogs Program Files Program Files Program Files (x86) Users Windows Local Disk (D:) Local Disk (D:) Network 	Name dshare PerfLoc Progra Users Windov	Open Open in new window Pin to Quick access ∰ Scan with Windows Defender.		7 PM AM 10 6 PM 8 PM	Type File folder File folder File folder File folder File folder	Size	
6 items 1 item selected							

• From the Sharing tab, click Advanced Sharing.

📒 dsshared Prop	erties			×
General Sharing	Security	Previous Versions	Customize	
Network File an	d Folder Sh	naring		
dssha Not S				
Network Path: Not Shared				
Share				
Advanced Shar	ing			
Set custom pen advanced shari		reate multiple shares	, and set other	
Advance	d Sharing			
Password Prote	ction			
		ount and password f with everyone.	or this computer	
To change this	setting, use	e the <u>Network and S</u>	haring Center.	
	Clo	ose Cance	el Apply	

• The Advanced Sharing dialog displays. Click **Permissions** to determine who has access to the folder.

Advanced Sharing	×
Share this folder	
Settings	
Share name:	
DSShared	
Add Remove	
Limit the number of simultaneous users to: 20	
Comments:	
Permissions Caching	
OK Cancel Apply	

• The Permissions dialog displays. Click Add to add the EnCase user.

Permissions for DSShared		×
Share Permissions		
Group or user names:		
Everyone		
	Add	Remove
Permissions for Everyone	Allow	Deny
Full Control	Allow	Deny
Full Control Change	Allow	
Full Control	Allow	
Full Control Change	Allow	

 The Select Users or Groups dialog displays. Enter the name of your EnCase user. If necessary, click Check Names to search through the list of Windows users. When you finish, click OK.

Select Users or Groups		×
Select this object type:		
Users, Groups, or Built-in security principals From this location:		Object Types
DESKTOP-3AABOJO		Locations
Enter the object names to select (examples):		
DESKTOP-3AABOJO\exampleUser		Check Names
Advanced	OK	Cancel

• On the Permissions dialog, check **Full Control**, then click **Apply**. When you finish, click **OK**.

Permissions for DSShared		×
Share Permissions		
Group or user names:		
Section Everyone		
axampleUser (DESKTOP-3A4	\BOJO\exampleU	ser)
	Add	Remove
Permissions for example User	Allow	Deny
Full Control	\checkmark	
Change	\leq	
Read	\checkmark	
ОК	Cancel	Apply

Refer to Microsoft documentation for more detailed information on configuring shared folders.

Installing the Passware Decryption Server

- 1. On the TPR, run passware-decryption-server-64bit.msi. The installation setup wizard displays.
- 2. Click Next on the initial screen. The End-User License Agreement dialog displays.
- 3. Accept the license agreement, then click Next. The Destination Folder displays.

🛃 Passware Decryptic	on Server 2016.4.0 Set	up	_		\times
Destination Fo	der				
Click Next to install	to the default folder or o	click Browse to cho	oose another.		\leq
	sware Decryption Serve and select another folde			n a different	
Destination Folder					
C:\Program Files	\Passware\Passware D	ecryption Server 2	016\	Browse	
Space required:	242MB				
Space available:	195GB				
Start Passware D	ecryption Server when	Windows starts			
		Back	Next	Cancel	

- Specify the installation folder. By default, the Passware Decryption Server is installed as a subfolder under Passware.
- 4. Click Next. A status dialog displays.
- 5. A confirmation dialog displays when the installation process completes.

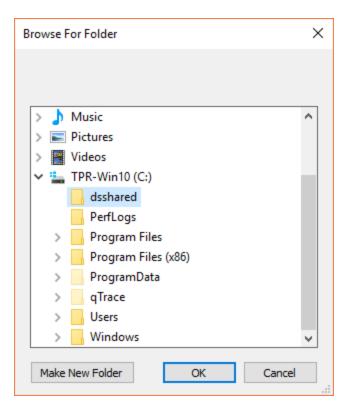


Configuring the Passware Decryption Server

After installation, run Passware Decryption Server.

Passware Decryption Server 2016 v4 build 13862	_	
Server running	Start Server	Stop Server
Active Jobs:		
ID	State	
Working Folder		
	•	Browse
Attack Performance: 0 pwd/sec		.::

1. Click **Browse** to select the Passware Decryption Server shared folder you created earlier. A list of folders displays.



2. Select your shared folder from the list, then click **OK**. The dialog closes.

Passware Decryption Server 2016 v4 build 13862				×
Server running	Start Ser	ver	itop Serv	ver
Active Jobs:				
ID	State			
Working Folder				
C:\dsshared			Browse	
Attack Performance: 0 pwd/sec				:

3. Click Stop Server, then click Start Server to restart the Passware Decryption Server.

Locking the TPR System

Passware Decryption Server runs as an application, not as a Windows service. In order to leave the Passware Decryption Server running, do not log off the TPR user after starting the Passware Decryption Server. To secure the system and leave the process running, lock the computer (Windows logo key + L).

Installing the Password Recovery Assistant

The Password Recovery Assistant is an EnCase plugin that communicates with the Passware Decryption Server. Install it on the EnCase Examiner computer you will use to recover passwords.

Before running the Password Recovery Assistant installation program, install Passware Kit Forensic and the Microsoft .NET framework on the EnCase Examiner computer.

Installing the Microsoft .NET Framework

Install the Microsoft .NET framework on your EnCase Examiner computers before installing the Password Recovery Assistant.

Select the following link to download the Microsoft .NET 4.5 installation program: https://www.microsoft.com/en-us/download/details.aspx?id=30653.

Follow the steps of the installation program, which detects if the Microsoft .NET framework is already installed.

Installing the Password Recovery Assistant

TO INSTALL THE PASSWORD RECOVERY ASSISTANT:

- 1. Copy the installation program Tableau Password Recovery Assistant.exe, to the EnCase Examiner computer.
- 2. On the EnCase Examiner computer, run Tableau Password Recovery Assistant.exe. The installation program opens.

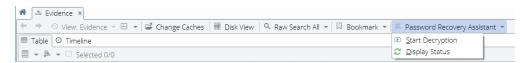
ଟ Setup - Tableau Password Recovery Assistant	_		×
Select Destination Location Where should Tableau Password Recovery Assistant be installed?			Ð
Please select an EnCase installation folder. Setup will install Recovery Assistant into this folder.	Tablea	au Passw	ord
To continue, click Next. If you would like to select a different folder,	click Br	rowse.	
C:\Program Files\EnCase8	E	Browse	
At least 1.6 MB of free disk space is required.			
< Back Nex	t >	Ca	ancel

- 3. Enter the EnCase installation directory as the Destination Location, then click Next.
- 4. The program installs the EnCase plugin.

Verifying the Installation

TO VERIFY THE PASSWORD RECOVERY ASSISTANT IS INSTALLED:

- 1. Launch EnCase.
- 2. Open an existing case or evidence folder.
- 3. Look for the Password Recovery Assistant option on the right side of the toolbar and right click to see the Start Decryption and Display Status options.



4. Right click a document in your case or evidence folder. You should also see an option for the Password Recovery Assistant.

🕋 📥 Evidence 🗙							
🗲 🔶 🕙 View: Entries 👻 🖽 👻 🖡	Bookmark	•	🗉 Go to file 🎙 Tags 👻 🚨	Review Pacl	kage 👻	Q Raw	Search Selected 👻
🖅 🗹 🚰 Entries	🖽 Table 🤇	ΟT	limeline 🖾 Gallery				
🕞 🗹 📲 Single Files	* II -	I ≞	▼ 🗹 Selected 1/2				
			Name	Rei <mark>Re</mark> j	Fol Igr	File Ext	Logical Size
	🗹 1 🗋 rag	r 77	vz.rar		_	rar	5,272
		ළු	<u>С</u> ору	Ctrl-C			
		ţ1	Sort	•			
		Д	Bookmark	•			
			Go to file				
		۲	<u>T</u> ags	•			
			Eind Related	•			
		4	<u>R</u> eview Package	+			
	<	Q	R <u>a</u> w Search Selected	•			
- Fields 📕 Report 🗟 Text 🗟 He		ъ	<u>E</u> ntries	۲.	nsolo	Eilo D	xtents 🛷 🖷
		£	Acquire	+	Insole	File c	xtents v ⊞
		<i>m</i>	Process				
Narr	ne	_				V	alue
5 Name		2	<u>D</u> evice	•			
s Tag			<u>O</u> pen With	+	_		
5 File Ext		c	Refresh				
1 Logical Size			Password Recovery Assistant		💿 <u>S</u> ta	art Decryp	tion
i Category	L	-	Archive		C Dis	play Statu	z
i Signature Analysis							

Verifying Access to the Passware Decryption Server's Shared Folder

To verify that EnCase has access to the Passware Decryption Sever folder, map a network drive from the EnCase Examiner computer to the shared folder on TPR.

- 1. Log on to the EnCase Examiner computer with the Windows credentials you granted access to the shared folder.
- 2. Click the Windows Start button, then click Computer.
- 3. In the tools menu, click Map Network Drive.
- 4. In the Drive box, click the drive letter you want to use. You cannot select a drive letter already in use by your computer.
- 5. In the Folder box, enter both the name of the Password Recovery server and the shared folder you created. The format is \\ComputerName\ShareName. For example, if the name of the TPR system is pass0123 and the folder is DSShared, enter \\pass0123\DSShared.

- If you are not logged on to the EnCase Examiner computer with the Windows credentials you granted to the shared folder, click Connect using different credentials, then enter the appropriate username and password.
- 7. Click Finish.

Installing Passware Kit Agent

Install the Passware Kit Agent on each of your additional TPR systems.

The Passware Kit Agent receives decryption requests from the Passware Decryption Server. It runs a parallel set of decryption algorithms for each file you submit for password recovery.

Installing Passware Kit Agent

- 1. On each of your secondary TPR systems, run passware-kit-agent-64bit.msi.
- 2. Follow the steps of the installation program.

🖟 Passware Kit Agent 2016.4.1 Setup	_		\times
Destination Folder			
Click Next to install to the default folder or click Browse to choose anoth	ier.		
Setup will install Passware Kit Agent in the following folder. To install in a click Browse and select another folder. Click Next to continue.	differer	nt folder,	
Destination Folder			
C:\Program Files\Passware\Passware Kit Agent 2016\		Browse	
Space required: 210MB			
Space available: 203GB			
Install for all users			
Start Passware Kit Agent when Windows starts			
Back Next		Cano	el

3. When the installation completes, check Run Passware Kit Agent and click Finish.



Note: The TACC acceleration units are not available until Passware Kit Agent is running as administrator.

Configuring Passware Kit Agent

After installation completes, the Passware Kit Agent opens. To connect the Passware Kit Agent to the Passware Decryption Server:

1. Click the Settings tab.

🤩 Passware Kit Agent	—		\times
Settings Hardware Performance Log			
Connection:			
Auto discovery			
Connected to:			
[desktop-3aabojo.rd.gsi] 192.168.190.60:10777			
O Manual connection			
Passware Kit or Decryption Server IP:			
localhost		Connect	
	I	Minimize Wir	ndow
Connected and idle			

2. The Passware Kit Agent attempts to connect to the Passware Decryption Sever. If it cannot connect via auto discovery, click Manual connection and enter the hostname or IP address of the Passware Decryption Server, then click Connect.

🧐 Passware Kit Agent						_		×
Settings	Hardware	Performance	Log					
Connecti	on:							
O Auto o	discovery							
Conne	ected to:							
Manual	al connectior							
Passware Kit or Decryption Server IP: 192, 168, 190, 60						0	onnect	
192.	100.190.00					0	onnect	- 1
						Mini	mize Wind	ow
Disconnec	ted and idl	e						

When the Passware Kit Agent connects to the Passware Decryption Server, the status at the bottom of the Settings dialog changes to Connected and idle.

Verifying the Connection to the Passware Decryption Server

To verify that Passware Kit Agent is connected to the Passware Decryption Server, click the Log tab. A message displays, indicating that the Passware Kit Agent is connected to the hostname and IP address of the TPR system.

ettings	Hardware	Performance	Log					
Log								
Туре		Time		Event				
Information		10/28/2016 2:51:09		Passware Kit Agent version 2016 v4.1 64-bit Build				
Information		10/28/2016 2:51:10		No AMD GPU device detected (OpenCL.dll not f				
Information		10/28/2016 2:51:10		TACC API version 1.2.0.3 (built 2016.08.26 20:43:10)				
Information		10/28/2016 2:51:10		TACC driver version 2.3.0.0 (built 2015.07.02 19:24				
Information		10/28/2016 2:51:11		Working in passive mode				
Information		10/28/2016 2:51:13		Connected to server [desktop-3aabojo.rd.gsi] 1				

Verifying the Passware Kit Agent Hardware

To verify the Passware Kit Agent is configured to use the TACC units:

1. Click the Hardware tab.

🥞 Passware Kit Agent				×	
Settings Hardware Performance Log					
Acceleration Units Intel(R) Xeon(R) CPU E5-1620 v3 @ 3.50GHz x8 NVIDIA GPU device [0] GeForce GT 730 Tableau TACC hardware accelerator(s)					
Hardware Acceleration Disable GPU acceleration when the user is active					
System Info OS: Microsoft Windows 10 RAM: 16,285 MB					
	C	opy to (Clipboar	ď	
		Min	imize Wir	ndow	
Connected and busy					

 Under Acceleration Units, check GPU device and Tableau TACC hardware accelerator(s) for best performance.

Locking the Passware Kit Agent's Server

In order to leave the Passware Kit Agent running, do not log off its computer after starting the process. To secure the system and leave the process running, lock the computer (Windows logo key+L).

Restoring Tableau Password Recovery to Factory Settings

If you encounter problems with TPR that cannot be resolved with the help of Guidance Software technical support, technical support may ask you to restore the system to its original image, using the Factory Restore Blu-ray disk.

- 1. Turn off TPR.
- 2. Connect an external USB Blu-ray drive to a USB port on the TPR.

- 3. Insert the Factory Restore Blu-ray disk into the drive.
- 4. Turn on TPR.
- 5. Press **F8** during POST. The boot menu displays.
- 6. Select the external drive as the boot device from the boot menu.
- 7. Follow the prompts displayed on the LCD to revert your system to its original state.

CHAPTER 3

RECOVERING PASSWORDS

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Overview

This chapter describes how to use TPR to unlock files, partitions, and drive volumes (all of which is simply referred to as "files" in this section), and recover passwords from EnCase.

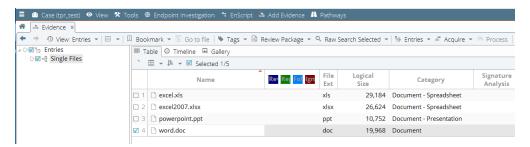
- 1. Select the files you want to unlock from your EnCase investigation or case.
- Invoke the Password Recovery Assistant to forward the request to Passware Kit Forensic and the Decryption Server.
- 3. Monitor the progress of the password recovery.
- 4. Retrieve the output of the recovery process.
- 5. View the unlocked files and recovered passwords, along with the original, encrypted files.

Recovering Passwords from within EnCase

You can use the Password Recovery Assistant to unlock files from your EnCase case or evidence folder. The following examples are from EnCase Endpoint Investigator, but the process is similar for other EnCase products.

TO UNLOCK FILES FROM ENCASE:

 From your evidence folder, click the files you want to unlock. You can select one or more individual files, or an entire Logical Evidence File.



Note: If the Protected File Analysis option was used during processing, the Protection complexity column displays information about whether the file is protected and the complexity of its encryption.

2. Right click the selected files, then select Password Recovery Assistant.

🗏 🧰 Case (tpr_test) 💿 View 🛠 To	ools 🧉	🖲 Endpoint	Investigation 😤 EnScript	📥 Add Evidence	📕 Path	ways		
🏦 📥 Evidence 🗙								
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			Name	Rev Rej Fol	lgn File Ext	0	Category	
	□ 1	🗋 excel.x	ls		xls	29,184	Document - Spreadsheet	
	2	🗋 excel20	007.xlsx		xlsx	26,624	Document - Spreadsheet	
	□ 3	🗋 powerp	point.ppt		ppt	10,752	Document - Presentation	
	₫ 4	🗅 word.d		Ctrl-C	doc	19,968	Document	
	<		Sort Bookmark Go to file Iags Eind Related	> > >	-			
😳 Fields 📕 Report 🗟 Text 🗟 He	ex 🚟		Review Package	•	e 🈁 File	e Extents 🛷 🔒		
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1 Logical Size			Device	•				
i Category i Signature Analysis 5 File Type			 Open With Refresh 	,			Þ	
s Protected			<u>Password Recovery Assis</u>	stant		Decryption		
i Protection complexity					<i>₿</i> <u>D</u> ispla	y Status		

3. Click **Start Decryption**. The Start Decryption dialog displays.

Star	t Decryption	×
EI.	nputs	
	Password Recovery System URL	
	http://192.168.190.60:8000	
	Dictionary Location	
	Attack Type	
	Normal ~	
	Language	
	English ~	
0	utput Location	
C	:\Users\test\Documents\EnCase\Cases\tpr_test\Export\Password Recovery Assistant I	
	OK Cancel	

- Password Recovery System URL is the URL of the Passware Decryption Server. The format is http://<server_name>>:8000. Enter the host name or IP address of the TPR system, followed by the Decryption Server's port number (8000 by default).
- Dictionary Location allows you to specify a folder containing an encase-4passware.xml file. You can create this file by using the Passware Export feature on the EnCase Tools menu. This option is available after the evidence has been indexed, or after running Analyze EFS. You can create your own dictionary or download a dictionary from the Internet. To add a custom dictionary, use the Extra Data option in the Passware Export feature and browse to the location of your custom dictionary.
- Attack Type specifies the thoroughness of the decryption process.
 - **Quick** is the shortest and least thorough attack type.
 - Normal is the default and recommended level for most documents.
 - Thorough is for your most critical documents.
- Language: Choose from Arabic, Dutch, English, French, German, Italian, Portuguese, Russian, and Spanish.
- Output Location is where the output of the decryption process is written. By default, it is the EnCase Export directory of the currently opened case or investigation.

4. Click **OK** to submit your request to the Passware Decryption Server. The files are submitted and the Display Status screen displays.

0.3311	ord Recovery System UR	L							
http://	/192.168.190.60:8000			Refresh					
· •	J≜ → □ Selected 0/1								
	Case	Filename	Status	Created	Started	Finished	Cancelled	Attack Performance	Full Path
🗆 1 t	pr_test	Office_2K7_X1aB.docx	Started	10/25/16 04:51:52 PM	10/25/16 04:51:52 PM			217607 pwd/sec	Single Files\Office_2K7_X1aB.

- The Display Status screen provides information about each of the files you select for password recovery. Full Path is the original location of the file.
- Press **Refresh** to retrieve the latest status information.
- To cancel password recovery for one or more files, check the box to the left of the filename, then click **Cancel Selected**.
- When the decryption process completes, click Retrieve Results. The Retrieve Results dialog displays.

Retrieve Selected Results	×
Results were successfully saved to C:\Users\test\Documents\EnCase\Cases\tpr_test\Export\Password Recovery Assistant Results	
☑ Open folder location	
☑ Add results to current case	
OK Cancel	

- **Check Open folder location** to open the EnCase export folder where the files were copied.
- Check Add results to current case to add the recovered files and passwords to your case.

Viewing Recovered Files and Passwords

EnCase creates a Logical Evidence File (LEF) for each of the files you submit for password recovery. The LEFs are added to the case folder that contains the original, password protected files.

In the example below, the document word.doc was selected for decryption from the PasswareSamples LEF.

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🗲 🔶 🕙 View: Entries 👻 🖽 👻 🖡	Boo	kmark 👻 🖻 Go to file 🔖 Tags 👻 🖻 R	Review Package 👻 🤇	Raw 9	Search Selected 👻	🗄 Entries 💌 🖨 Acquire 👻	1 Process
- D 🗹 😓 Entries	Ш Т	able 📀 Timeline 🖼 Gallery					
-D 🗹 💷 Passware Samples	5	⊞ 👻 🗎 👻 Selected 1/5					
		Name	Rei Rei Foi Ign	File Ext	Logical Size	Category	Signature Analysis
	01	🗋 excel.xls		xls	29,184	Document - Spreadsheet	
	2	🗋 excel2007.xlsx		xlsx	26,624	Document - Spreadsheet	
	□ 3	🗅 powerpoint.ppt		ppt	10,752	Document - Presentation	
	☑ 4	🗅 word.doc		doc	19,968	Document	

After the password recovery process completes, a new LEF is added to the case. To view the LEF added to the case, click **View** > **Evidence**. The **Evidence** tab displays.

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	✤ ④ View: Evidence ▼	🖽 👻 🚔 Open 🗳 Triage 🗙 Remove	e 📿 Rescar	n 🦘 Upo	date Paths 🛛 😂 Change Caches 🛛 🎆 Disk V
🔳 Та	able 🕘 Timeline				
⊞ -	🔎 📮 🔽 Selected 0/2				
	Name	Primary Path	Evidence Paths	Extra Paths	GUID
			Paths	Patris	
01	Passware Samples	C:\Users\test\Desktop\Passware Sam	•		efb6cf7822b518c39a31b71641b64e
2	□ word.doc	C:\Users\test\Documents\EnCase\Cas	•		dca1dffd441441aaa633aaa4b73698c8

To display an unlocked file and its recovered password, click its LEF.

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🗲 🔶 🕙 View: Entries 👻 🖽 👻 🗍	Bookmark 👻 🔄 Go to file 🎙 Tags 👻 🗟 R	eview Package 👻 🔍 Rav	v Search Selected 👻	🕆 🗄 Entries 👻 🖨 Acquire 👻	1 Process
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	Name	Rei Rei Fol Ign Ext		Category	Signature Analysis
1	1 excel.xls	xls	29,184	Document - Spreadsheet	
1	2 excel2007.xlsx	xlsx	26,624	Document - Spreadsheet	
1	3 D powerpoint.ppt	ppt	10,752	Document - Presentation	
	☑ 4 🗋 word.doc	doc	19,968	Document	

The contents of the LEF include:

- The status of the password recovery process.
- A log that includes the recovered password.
- The XML output of the processing from TPR.
- The path of the original password protected file.

If Passware is able to decrypt the file type, a copy of the unlocked/decrypted file is also present in the LEF.

Linking to the Original File

If Passware was able to decrypt your file and the unlocked file is present in your LEF, it is automatically linked to the original, password protected file.

To display the original file, right click the unlocked file in the **Evidence** tab and select **Go to file**.

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🔶 🔶 🕙 View: Evidence 👻	🖽 👻 🎬 Open 🗳 Tr	riage 🛛 🗙 Remove	e 😅 Rescan 🦘	2		71 - (۹ →	U -	· ·		ø
I Table O Timeline											
Ⅲ → 🖡 → 🗹 Selected 1/2											≡
Name						imary Path					
🗆 1 📲 Single Files	C:\Users\test\Desktop\	Passware Sample:	s\word.doc								
☑ 2 □ word.doc	C:\Users\test\Docume			assword	Recov	very Ass	sistant f	Results	DA 4B	4D5AD628	7E5D8
¢											
😳 Fields 📕 Report 🖭 Con	sole 🚔 Evidence Paths	Detter									>
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Ⅲ ▼	Name	Extra Paths	≝ Acquisition Ini	io 🔺	A 4			2 2		Lock	> = ^
S Name	Name		Acquisition Inf Acquisition Inf word.doc	io 🔺	A 4	Valu		2 2		Lock	≡
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5 Name	Name	Extra Paths	- word.doc			Valu	le	_			=
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S Name S Primary Path ⇒ Evidence Paths Extra Paths S GUID S Index File ⇔ Actual Date	Name		ed813fbe20a5e7a5	ments\En 7a53375b	Case\Ca feaf1ad	Valu ases\tpr_ 2f	ue test\Expo	ort\Pass	word Rec	overy Assista	= in
S Name S Primary Path Evidence Paths Extra Paths GUID S Index File Actual Date Target Date	Name		ed813fbe20a5e7a1 C:\Users\test\Deskt	ments\En 7a53375b	Case\Ca feaf1ad	Valu ases\tpr_ 2f	ue test\Expo	ort\Pass	word Rec	overy Assista	= in

The original file displays.

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	Name Rei Rei Ign File	Logical Size	
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	4 1 result.xml xml	2,346	Doci
	5 status	8	Unk
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	5AD6287E5D8380B88657B41751CB-unprotected.doc) → = Condition		
About P Founded in 1 agencies, IT	assware Inc. 998, Passware Inc. 998, Passware Inc. provides help desk personnel, law enforcement, forensic professionals, business and home users around the world with security tools a availability in the event of lost passwords.		
tpr_test\word.doc\4B4D5A	D6287E5D8380BB8657B41751CB-unprotected.doc		

CHAPTER 4

SUPPORT

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Overview

Guidance Software is committed to providing our customers with the best user experience possible. There are a variety of ways for you to get the help you need, when you need it.

This section provides information on our various support resources.

- Technical Support
- Customer Service
- Sales

Find Support Online

Guidance Software provides an array of resources to help you find answers to your questions online.

To access online support, navigate to www.guidancesoftware.com and click Support.

SALES

Links under Sales enable you to:

- Contact sales by phone or form submission
- Request a demo
- Call a sales representative
- Request a quote
- Locate your nearest reseller

TECHNICAL SUPPORT

Links under Technical Support enable you to:

- Find contact hours, phone numbers, and hours of availability
- Browse FAQs
- Call a technical support agent
- Register your product to receive future downloads
- Access customer community forums
- Join the customer community where you can:
 - Access forums
 - Read knowledge base articles
 - Log and track issues

- Chat with a representative
- Download documentation
- Download products
- Register your account

CUSTOMER SERVICE

Links under Customer Service enable you to:

- Find contact hours, phone numbers, and hours of availability
- Browse FAQs
- Call a technical support agent
- Register your product to receive future downloads
- Receive help immediately in the event of a breach
- Access customer community forums
- Join the customer community where you can:
 - Access forums
 - Read knowledge base articles
 - Log and track issues
 - Chat with a representative
 - Download documentation
 - Download products
- Register your account

Access the Customer Community

The customer community is an online meeting place where you can:

- Register your product
- Access forums
- Read knowledge base articles
- Log and track issues
- Chat with a representative
- Download documentation
- Download products

To access the customer community navigate to www.guidancesoftware.com/community.

View Customer Forums

The Guidance forums provide a rich repository of information:

- EnCase App Central offers downloadable user-created applications
- · General discussion forums provide information about products and specific issues
- Non-English language forums are also available

In these forums you can learn from community members, ask questions, and share your expertise with others.

To access the forums navigate to www.guidancesoftware.com/community.

Browse the Knowledge Base

The knowledge base consists of articles on a variety of topics about Guidance Software products.

The knowledge base is part of the Customer Community and may be accessed by navigating to www.guidancesoftware.com/community.

Log and Track Issues

You can create a new support case to log issues, track existing cases, or request a new feature through the customer community at <u>www.guidancesoftware.com/community</u>.

Register your Product

Register your Guidance Software product to receive product updates.

To register your product, navigate to www.guidancesoftware.com/register.

If you have trouble registering your product, contact Customer Service.

If you have trouble downloading updates after registering, contact Technical Support.

Register your Account

Registered owners of Guidance Software products gain access to the forums, knowledge base articles, and other support resources contained within the Customer Community.

To register your account, navigate to <u>www.guidancesoftware.com</u> and click **Support** > **Technical Support** > **Register Product**. A registration form displays.

Provide all requested information. This helps us identify you as a registered owner of a Guidance Software product.

After you complete the registration form, click Register.

After submitting your form, you will receive an email. Once you have verified your email address, your account will be reviewed and approved within 24 business hours.

Once your registration is approved, you can access the Customer Community by navigating to <u>www.guidancesoftware.com</u> and clicking **Support > Technical Support > Customer Community**.

Contact Guidance Software

There are many ways to contact Guidance Software if you want help, more information, or to provide feedback.

- Contact Sales
- Contact Customer Service
- Contact Technical Support

Contact Sales

BY TELEPHONE:

626-229-9191 888-999-9712

BY ONLINE REQUEST:

Navigate to <u>www.guidancesoftware.com</u> and click **Support > Sales** to request a demo, speak to a member of our sales team, or request a quote.

Contact Customer Service

BY TELEPHONE:

626-463-7964 (Monday through Friday, 7 am to 5 pm, Pacific Time) 866-229-9199

BY ONLINE REQUEST:

Navigate to www.guidancesoftware.com and click Support > Customer Service > Contact.

Contact Technical Support

Guidance Software provides telephone technical support 24 hours a day, excluding weekends and holidays, through the regional support numbers listed below. All technical support inquiries are automatically routed to either our US or UK office, depending on the time of day.

UNITED STATES:

Phone: +1 (866) 973-6577 or (626) 463-7977 Fax: +1 (626) 229-9199 1055 E. Colorado Blvd. Pasadena, CA 91106

UNITED KINGDOM:

Phone: +44 (0) 1753-552252, Option 4 Fax: +44 (0) 1753-552232 Thames Central, 5th Floor Hatfield Road Slough, Berkshire UK SL1 1QE

EMEA AND APAC:

+800-4843-2623

For customers in the following countries, use your country's local exit code and call: +800-GUIDANCE (4843-2623). Do not dial US country code 1.

- Australia
- Belgium
- China-North
- China-South
- Denmark
- Finland
- France
- Germany
- Hong Kong
- Italy
- Japan
- Malaysia
- Netherlands
- New Zealand
- Norway
- Poland

- Singapore
- South Korea
- Spain
- Sweden

If you do not know your exit code, refer to <u>http://www.howtocallabroad.com/codes.html</u>. Dial your country's exit code, then dial 800-4843-2623.

Chat with a Technical Services Engineer

Live chat is available with technical service engineers from 10 pm Sunday to 6 pm Friday, Pacific Time.

To chat, navigate to <u>www.guidancesoftware.com</u> and click **Support > Technical Support** > **Customer Community**.

On the Customer Community home page, open the left sidebar with the ALT + S keyboard command, or by clicking the arrow in the left margin.

In the Live Chat area, click Start Chat.

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