DISCRETE TECHNOLOGIES

A GTGI COMPANY

SecureDisc Rimage Edition

Disc Encryption for Rimage Publishing Systems

GTGI · 3108 Columbia Pike · Suite 301 · Arlington VA 22204 · 703-486-0500 · www.gtgi.com



Introduction to SecureDisc

- Encrypts the *entire disc image*, not just files or folders
- Provides password access control and authentication
- Simple to use minimal changes to workflow needed
- Two different, free decryption clients for flexibility in deployment
- End user needs the SecureDisc Client and correct password to access an encrypted disc
- Does *not* require specialized blank media
- Encrypts with 256-bit AES
- Compatible with Rimage Software Suite 8.0 and higher



Licensing | Updates | Support

- SecureDisc is licensed per server (control center)
- Software Assurance & Enhancements (SAE) subscriptions cover updates to software
 - Patches within a major revision (ex.: v1.0 to v1.1)
 - SAE rollover to major version release (ex.: 1.1 to 2.0)
 - Per year SAE pricing based on single unit price per unit purchased
 - Two release targets per year
- SAE purchases include
 - E-mail support for 1 year
 - Software updates



SecureDisc: How it Works

- SecureDisc loads as a transparent proxy between Messaging Server and Production Server
- SecureDisc can be enabled per-job through the User Type flag in the Rimage job API, or turned on for all jobs using forced encryption mode
- When enabled, SecureDisc intercepts the production order before it reaches Production Server
- SecureDisc retrieves the encryption password from one of four sources:
 - Merge field
 - Password file inside the plaintext image
 - Fixed option as set in SecureDisc console
 - SQL database via ODBC (optional)
- SecureDisc automatically encrypts the disc image mentioned in the production order
- After encryption is complete, SecureDisc passes the image back to Production Server to continue the recording process. The entire encryption process occurs transparently within the Rimage workflow



Server Requirements

- Must be installed on Rimage Control Center (standalone or embedded)
- Windows XP (32-bit), Windows 7 (32/64-bit), Windows Server 2003/2008/2008 R2 (32/64-bit)
- 5MB free disk space for program files
- Rimage Producer Suite version 8.0 and above



Image Packs

- SecureDisc for Rimage is licensed per encrypted image generated
- Each unique encrypted disc counts against a running total of available pre-paid images
- Licenses are provided as refills or "Image Packs"
- Image Packs may be purchased and applied at any time
- Image Packs that have been applied never expire
 - A running count is kept of every unique encrypted disc image
 - Every unique encrypted image decrements an internal counter
 - Multiple copies of the same unique encrypted image count as one
 - Image Packs are supplied in quantities of 1K, 5K, 10K & 25K

Image licensing status		
0	processed	<u> </u>
20	remaining	There are less than 200 images left. Please refill soon.
Get Refill		



Applying Image Packs

- SecureDisc for Rimage has a secondary license per encrypted image generated
- After the initial registration, image packs can be added
- Open the SecureDisc Console *Start > Programs > SecureDisc for Rimage*
- Click on Get Refill
 - Select an Image Pack (refill) quantity and click Generate
 - E-mail the displayed code to support@gtgi.com.



Discrete Refill System	×
Request a refil	
Select the refill size you want, then press "Generate" to get your request cod	e.
50 images Generate Deactivate this	system
<gtgiregfile type="Request"> <fileid>76cJZjzKILeULITp 19Rc0r6schrtJ5g0cxA6vwWoCsQ=</fileid> <regdata>lk2nHvfthYZAffR8q4A9Tm/HzoZO3QvY9JXXaM4sHMagWHBym/St <regstats>IUYbk7BAj7dq9yd1qtnjqnU/+Z7YDHw0B9xTNO9R7JBGgStnetzx- </regstats></regdata></gtgiregfile>	∕IHzSpofiC +Njj5tOj4
Email or FAX this request block to Discrete with your name and contact info to purchase a refill block.	Clipboard
Add a refil	
Paste purchased refill block here and press "Add Refill"	
Paste from Clipboard A	dd <u>R</u> efill
	Close





- Open the SecureDisc Console *Start > Programs > SecureDisc for Rimage*
- *Image licensing status* displays the number of used and available images.
- Automatic settings backup backs up SecureDisc's license status and settings to a file on disc (external HDD or network share)

SecureDisc Rimage Edition C	Console			×
Status Trigger Encryption	Other settings			
SecureDisc is:	I	No status available		Show Log
Image licensing status				
0	processed			<u> </u>
20	remaining		There a	re less than 200 images left. Please refill soon.
Get Refil				
Automatic settings backu	p tion backs up vital re	gistry data and setting	gs in the case of a sy	vstem failure.
Discre Path for backup files:	\\THEWHO\Rima	ge\SecureDisc	a network share, if	possible.
Write a backup file:	Every day at	09:00 PM	* *	
	C Every	minutes		
Lock settings				About SecureDisc
		ОК	Cancel	Apply Help



Configuration

- SecureDisc Rimage Edition is configured through the SecureDisc Console application
- SecureDisc Console reports system and licensing status, and allows configuration of encryption, networking, and disaster recovery options



Integration: Password Sources

- SecureDisc supports several password integration options:
 - Merge Field allows the password to be placed in a merge field that is typically used for printing. This is the most popular option and the easiest to integrate
 - If needed, data from two merge fields may be combined with the *Combine Fields option*
 - The *Content* option looks for the password inside of a text file included with the contents of the disc to be encrypted
 - Always Use allows the specification of a fixed password that is used for all encrypted discs
 - The optional ODBC source allows password retrieval from an SQL database
- Passwords may be 1-255 characters in length
- Passwords are UTF-16 and may include special characters



Password Source - Merge

- In the SecureDisc Console, choose the *Encryption* tab, and set *Password options* to *Merge field*
- Set the *merge field* number. This is the field SecureDisc will read the password from. In most integration scenarios, it is typically the last field in an existing merge file format
- If the merge file has a header, fields can be specified by name
- After a disc is encrypted, the selected merge field is blanked inside the merge file before the disc is printed

SecureDisc Rimage Edition	on Console	×
Status Encryption Of	ther settings	
Enable encryption Password source (XM Merge field: Content: Always use	IL/NWP/IOF overrides this setting) 5 ***	Forced encryption mode Use forced encryption When a blank password is given:
 Combine fields: ODBC: 	Options Setup	
Client On Board Client On Board Enable Client On Path to client file	Board s: \\THEPOLICE\Rimage\SecureDis	sc\Client On
Lock settings]	
	C	OK Cancel Apply Help



Password Source - Content

- In the SecureDisc Console, set *Password options* to *Content*
- In the *Content* field, set a file name. This is the name of a file that will be included in the disc content that contains the password. *Password.txt* is typically used
- When generating a job, include a plain text file that contains only the desired encryption password, and name it *Password.txt*
- Include the plain text file in the root folder of the content
- SecureDisc will check the cached disc image for the text file. The file will be blanked after SecureDisc retrieves the password, before encryption takes place

SecureDisc Rimage Edition Console	×
Status Encryption Other settings	
Enable encryption	
Password source (XML/NWP/IOF overrides this setting)	Forced encryption mode
	When a blank password is given:
Ontent:	Reject the job (recommended)
<u>A</u> lways use password	Bypass encryption and record the job anyway
Combine fields: Options	
ODBC: Setup	
Client On Board	
Path to dient files: \\THEPOLICE\Rimage\SecureDis	c\Client On
Lock settings	
	OK Cancel Apply Help



Password Source - Fixed

- In the SecureDisc Console, set *Password options* to *Always Use*
- In the *Always use* field, set the desired encryption password
- All jobs that have encryption enabled will use the password specified here

Password source (X Merge field: Content: 	ML/NWP/IOF overrides this setting) 5	Forced encryption mode Use forced encryption When a blank password is given: Reject the job (recommended)
 <u>A</u>lways use Combine fields: ODBC: 	password Options Setup	Reject the job (recommended) Bypass encryption and record the job anyway
Client On Board Enable Client C Path to client fi	In Board les: \\THEPOLICE\Rimage\SecureD	Disc\Client On



Integration: Enabling SCD

- Enabling SecureDisc encryption is done on a per-job basis
- The Rimage QuickDisc application can enable encryption natively
- Custom and third-party applications can enable encryption:
 - Through the XML API
 - Through the IOF/POF interface
 - Through Network Publisher



Enabling SCD - QuickDisc

- Start A QuickDisc DVD or CD job
- Specify password in merge field *or c*reate a password.txt file to be included with the content *or* set fixed password in console
- On the last page of the QuickDisc wizard click *More Settings*
- In *Recording* settings, check *Enable Recording Modifications*
- Submit job

Project1 - Data CD	(Step 3 of 3)			×
Review and R Review or change s CD.	Record settings. Select 'Save' to save this Project. When you are finished, select 'Record' to record the	A Previous	Record	Next
CD Settings	Disc jitle: My Disc 473 MB Data CD Joliet Label: \\THEPOLICE\Rimage\QuickDiscTemplates\0409\Beta_Everest btw		More <u>S</u>	ettings
Output Settings	Autoloader: Use any • Place copies in <u>m</u> ailslot Email me when all copies completed			
Project File This Project has not	been saved.		Save	s v
View order text				0





Enabling SCD – Rimage API

- 3rd party and custom applications can enable SecureDisc encryption using a special flag
- In all available interfaces (XML, IOF/POF, Netpub) the flag works the same way
- The flag must be set with each job that needs to be encrypted
- To enable encryption specify *User Type* as "1"
- In some cases the previously mentioned password integration options may be overridden by specifying the desired password inside the order API
- To override other password options specify *User Data* as the desired password
- See the Rimage documentation specific to the API your application is using for more information about the proper placement of the *User Type* and *User Data* flags



Integration: Forced Encryption

- Some 3rd party applications cannot be modified to take advantage of the special flags required to enable SecureDisc encryption
- Encryption can be *forced* using SecureDisc Rimage Edition's forced encryption option
- When encryption is forced, all incoming jobs are encrypted using the password integration type set in the SecureDisc Console
- Jobs that do not meet the requirements for encryption (such as a blank password field) can either be rejected, or passed through without encryption
- Blank password handling can be configured from within the SecureDisc Console



Reading an Encrypted Disc

- Users must have the SecureDisc Decryption Client installed *and* the correct password to access an encrypted disc
- After entering the correct password, the disc is unlocked and decryption is performed in real time
- There are two types of SecureDisc Client software, the Explorer Client and the Resident Client. Please try both and determine which suits your needs better
- Both types of SecureDisc Client are free to distribute to your end users



SecureDisc Explorer Client

- Requires no installation, no reboots, and no Administrator rights in almost all use cases
- Files larger than 50,000,000 bytes may require a one-time logon as Administrator and reboot
- Uses built-in Windows networking functions for driveletter access
- Slower and less compatible than the Resident Client, but better end-user experience
- Recommended for smaller data sets (600 MB or less) and situations where Administrator rights are difficult to get



SecureDisc Resident Client

- The original SecureDisc Client
- Installs as a filter driver on CD-ROM class devices
- Entirely transparent
- Very fast
- Requires no reconfiguration of viewer software or other proprietary applications
- Requires Administrator rights to install
- System must be rebooted to complete install
- Recommended for large data sets (DVD or Blu-Ray) and situations where Explorer Client cannot work



Integration Notes

- The log file contains valuable information
 - The log file is plain text and well formatted for easy parsing by an external application
 - Encryption status is always reported in the log





For more information please visit our website www.gtgi.com