Stonesoft Integration

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Introduction

This document describes steps to configure a Stonesoft Firewall SSL VPN with Swivel as the authentication server.

Swivel integration is made using RADIUS authentication protocol with an option to configure the login page. Depending on your needs, you can modify the default customization object or create a new customization object. There are many ways to configure it to work with Swivel.

To use the Single Channel Image such as the TURing Image and PINpad, the Swivel server must be made accessible. The client requests the images from the Swivel server, and is usually configured using a NAT (Network Address Translation), often with a proxy server. The Swivel appliance is configured with a proxy port to allow an additional layer of protection.

Prerequisites

Stonesoft Firewall

Swivel 3.x

Modified login page for TURing

Modified login page for PINpad

Baseline

Stonesoft 4.9.9|1050

Swivel 3.9

Architecture

Stonesoft makes authentication requests against the Swivel server by RADIUS.

The client makes TURing requests against the Swivel server using HTTP/HTTPS

Swivel Configuration

Configuring the RADIUS server

Configure the RADIUS settings using the RADIUS configuration page in the Swivel Administration console by selecting RADIUS Server. To turn on RADIUS authentication set **Server Enabled** to YES. The Host or IP address is the interface which will accept RADIUS requests, leave this blank (or use 0.0.0.0) to allow RADIUS requests on any interface.

For troubleshooting RADIUS debug can be enabled together with the debug log option, see Debug how to guide

Note: for appliances, the Swivel VIP should not be used as the server IP address, see VIP on PINsafe Appliances

RADIUS>Server	0
Please enter the details for the	he RADIUS server.
Server enabled:	Yes 💌
IP address:	0.0.0.0
Authentication port:	1812
Accounting port:	1813
Maximum no. sessions:	50
Permit empty attributes:	No 💌
Filter ID:	No
Additional RADIUS logging:	Both 💌
Enable debug:	Yes
Radius Groups:	Yes 💌
Radius Group Keyword:	POLICY
	Apply Reset

Setting up the RADIUS NAS

Set up the NAS using the Network Access Servers page in the Swivel Administration console. Enter a name for the VPN server. The IP address has been set to the IP of the VPN appliance, and the secret ?secret? assigned that will be used on both the Swivel server and VPN RADIUS configuration.

RADIUS>NAS 🥑

Please enter the details for any RADIUS network access servers. A NAS is permitted to access the auther via the RADIUS interface.

NAS:	Identifier:	Device Name
	Hostname/IP:	192.168.0.1
	Secret:	•••••
	EAP protocol:	None
	Group:	ANY
	Authentication Mode:	All
	Change PIN warning:	No 💌
		Apply Reset

You can specify an EAP protocol if required, others CHAP, PAP and MSCHAP are supported. All users will be able to authenticate via this NAS unless authentication is restricted to a specific repository group.

Enabling Session creation with username

The Swivel server can be configured to return an image containing a TURing image by presenting the username via the XML API or the SCImage servlet.

Go to the ?Single Channel? Admin page and set ?Allow Session creation with Username:? to YES.

To test your configuration you can use the following URL using a valid Swivel username:

Appliance

https://Swivel_server_IP:8443/proxy/SCImage?username=testuser

For a software only install see Software Only Installation

Stonesoft Configuration

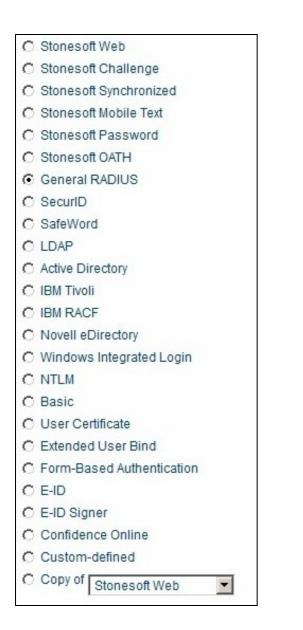
Create a Radius Authentication Method

On the Stonesoft management console select the Manage System tab and then Authentication Methods, select Add Authentication Method...

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			Help	Browse	Restore	Publish
Monitor System	Manage Accounts and Storage	Manage Resou	Irce Acce	ss	Manage Sy	stem
Manage System						
Authentication Methods	Manage Authentication Methods	S				[]
Certificates	Overview					
Abolishment	You can view, add, edit, and delet					ted below
Assessment	To edit or delete an authenticatio	n method, click the	appropria	te link in the	list	
RADIUS Configuration	Add Authentication Method	Add Authentication Method				
Notification Settings						
Device Definitions	Registered Authentication Meth	ods				
Access Points	Display Name Stonesoft Web					atus abled
Policy Services	Stonesoft Password				Ena	abled
Authentication Services						
Administration Service						
Directory Service						
OATH Configuration						
Log Off						

Select the General RADIUS authentication method



Ensure the following are checked:

- Enable authentication method
 Visible in authentication menu

Enter a Display Name, then click on Next.

Add Authentication	Method		?
General Settings			
one authentication	method server to the	entication method General RADIUS authentication method. The authe te an authentication method server	ntication method servers
Enable authenti	cation method		
Visible in auther	ntication menu		
Display Name	SwivelR	a	
Template Name	RADIUS	RADIUSDefault	
	Manage	Default Template Specification	
Registered Auther	tication Method Ser	vers	
Host	Port	Timeout	
Add Authentication	n Method Server		
< Previous			Next >

Enter the following information and when complete click Next:

Host: Hostname/IP address of the Swivel server

Port: RADIUS authentication port, 1812 is the default for Swivel

Time-out: default 15000 milliseconds

Shared Secret: The shared secret entered on the Swivel NAS entry for the Stonesoft server

Add Authentication Me	ethod Server		?
General Settings			
Enter the following sett authentication method.		ntication method server and click I	Next to add it to the
Host	172.16.2	05.235	
Port	1812		
Time-out	15000	milliseconds	
Shared Secret	•••••		
< Previous			Next >

Authentication Metho	ods > Add Aut	entication Method
Add Authentication	Method	?
General Settings		
one authentication m	ethod server	authentication method General RADIUS. You need to add at lea o the authentication method. The authentication method server: delete an authentication method server, click the appropriate lir
Enable authentica	tion method	
Visible in authenti	cation menu	
Display Name	Sv	ivelRadius
Template Name	RA	DIUSDefault
	Ma	nage Default Template Specification
Registered Authenti	cation Metho	Servers
Host	Port	Timeout
172.16.205.235	1812	15000
Add Authentication	Method Serve	r
< Previous		Next >

On the Extended Properties page click on Add Extended Property then select *Allow user not listed in any User Storage* and set it to *true* The *Reveal RADIUS reject reason* can be used for troubleshooting if set to true.

Edit Authentication I	Method SwivelRadius	?
Add Extended Prope	erty	
Enter the following info	rmation for the extended property.	
Key	Lock user ID to session	
Value	Lock user ID to session Save credentials for SSO domain	
	Allow user not listed in any User Storage Force create user	
< Previous	Create user on failed logon ActiveSync DeviceID Locking	Add

possibly not use: Stonesoft Authentication Method RADIUS Extended Properties.jpg

Г

The configured RADIUS authentication method will appear under the list of Registered Authentication Methods.

Manage Authentication Methods	2
Added Authentication Method SwivelRadius	
Overview	
You can view, add, edit, and delete authentication met To edit or delete an authentication method, click the a	
Add Authentication Method	
Registered Authentication Methods	
Display Name	Status
Stonesoft Web	Enabled
Stonesoft Password	Enabled
SwivelRadius	Enabled

Select Authentication Services then Add Authentication Service

Monitor System	Manage Accounts and Storage	Manage Resource Access	Manage System		
Manage System	Authentication Services				
Authentication Methods	Manage Authentication Service	S			
Certificates	Overview				
Abolishment		te Authentication Services, as well as m	anage global RADIU		
Assessment	authentication and password/PI	V settings.			
RADIUS Configuration		es are listed below. To edit or delete an			
Notification Settings	Service Settings.	st. To manage global settings, click Man	age Global Authentic		
Device Definitions	Add Authentication Service				
Access Points	Aud Authentication Service				
Policy Services	Registered Authentication Serv	ices			
Authentication Services	Service ID	Display Name	Internal Hos		
Administration Service	4	Authentication Service	127.0.0.1		
Directory Service					
OATH Configuration	Manage Global Authentication S	ervice Settings			
Log Off					

On the RADIUS Authentication tab, ensure that Proxy unknown users is checked.

Authentication Services	> Global Settings		
Manage Global Authentic	cation Service Settings		?
RADIUS Authentication	Password/PIN Settings	E-mail Messages	SMS/Screen Messages
Manage RADIUS Authe	entication		
Add or edit global settin	igs for RADIUS authentic	ation here.	
When both "Drop unkno precedence over the for	own users" and "Proxy un rmer.	iknown users" are s	elected, the latter takes
🗖 Drop unknown sess	ions		
🗖 Drop unknown user:	S		
Proxy unknown user	s		
🗖 Reveal reject reasor	1		
Session time-out	180 seco	nds	
RADIUS encoding	UTF-8		
			Save

When the configuration is complete then select publish

			Help	Browse	Restore	Put	
Monitor System	Manage Accounts and Storage	Manage Resource Access		ss	Manage System		
	Publish Version						
Log Off	Configuration Published When the configuration has been Stonesoft network. For detailed in Published content - All files synch Access Points Display Name Access Point	nformation, please			to all servers i Status Successfu		
	Policy Services Display Name Policy Service Authentication Services Display Name Authentication Services	Host 127.0.0.1 Host 127.0.0.1			Status Successfu Status Successfu		

Optional: Create a Secondary Authentication Server

These modifications are used only if some of the single channel features are required. The prerequisites section contains login pages for TURing and PINpad.

Login Page Customisation

The login page, GenericForm.html can be modified to allow a variety of different login methods.

To select a different login page browse to the files in:

select browse to select the source file, then click on Upload

Name	Size	Тур
[]		
Applet.html	1.93 KB	.htr
Dialog.html	1.97 KB	.htr
Dialog.pda.html	1.10 KB	.ht
Dialog.wml	541 bytes	.wi
GenericForm.html	2.92 KB	.htr
GenericForm.pda.html	2.09 KB	.htr
GenericForm.wml	1.34 KB	.wi
SelfServiceForm.html	5.80 KB	.ht
SelfServiceFormPIN.html	5.55 KB	.ht
SelfServiceUserChallenge.html	3.05 KB	.htr
setFocus.js	733 bytes	.js
setFocus.pda.js	660 bytes	j:
Web.jar	30.95 KB	.ja
Web.js	5.45 KB	.js
WebActiveX.cab	216.27 KB	.ca
WebSkin.zip	14.13 KB	.zi

Testing

Browse to the login page and view the login page for the required configuration.

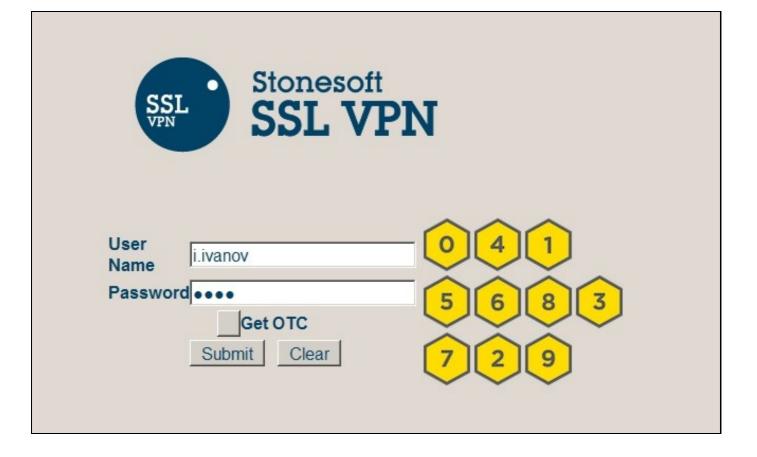
Stonesoft login page with Dual Channel using SMS, Mobile Client

SSL	Stonesoft SSL VPN
SwivelRadius	
User Name	
Password	
	Submit Clear

Stonesoft login page with Single Channel TURing image

Stonesoft SSL VPN SwivelRadius
User Name i.ivanov Password
Get OTC
1 2 3 4 5 6 7 8 9 0 4 2 7 8 0 15 1 15 1 1
Submit Clear

Stonesoft login page with PINpad



Additional Configuration Options

Two Stage Authentication

Swivel can be configured under the RADIUS/NAS settings to use Two Stage Authentication, whereby a password is entered and if correct the user is then prompted for a One Time Code, either from a graphical TURing image, mobile phone client or a Challenge and Response SMS sent to the user.

Troubleshooting

Check the Swivel logs for Turing images and RADIUS requests.

Image from PINsafe server absent

Known Issues and Limitations

None

Additional Information

For assistance in the Swivel installation and configuration please firstly contact your reseller and then email Swivel Secure support at support@swivelsecure.com