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### How To Enable OpenOTP Authentication On Juniper-Pulse Secure

This document explains how to enable OpenOTP authentication with Radius Bridge and Juniper SSL VPN.

#### 1. WebADM/OpenOTP/Radius Bridge

For this recipe, you will need to have WebADM/OpenOTP installed and configured. Please, refer to <u>WebADM Installation Guide</u> and WebADM Manual to do it. You have also to install our Radius Bridge product on your WebADM server(s).

#### 2. Register Your Juniper VPN In RadiusBridge

On your OpenOTP RadiusBridge server, edit the /opt/radiusd/conf/clients.conf and add a RADIUS client (with IP address and RADIUS secret) for your Juniper VPN server.

#### Example:

```
client <VPN Server IP> {
  secret = testing123
  shortname = Juniper-Pulse
  }
```

#### 3. Configuring New Radius Server On Juniper

- 1. Log in to the Pulse web-based management interface.
- 2. From the left-hand menu, select Authentication --> Auth. Servers. --> Radius Server --> New Server.
- 3. On New Radius Server page configure (see example below):
- > Name i.e. OpenOTP
- > NAS-Identifier any value to describe your Juniper.
- > Radius Server your OpenOTP server IP or hostname.
- > Shared Secret i.e. testing123 (this value pre-configured to OpenOTP Virtual Machine). Finally, save changes.

Administrator Console					
System					
Status	Auth Servers >				
Configuration	New Radius Server				
Network					
IF-MAP Federation	Name:	OpenOTP	Label to reference this server.		
Log/Monitoring	- Tanici				
Authentication	NAS-Identifier:	MyPulse	Name of the device as known to Radius server		
Signing In Endpoint Security	Primary Server				
Auth. Servers	Radius Server:	rcvm.mycorp.com	Name or IP address		
Administrators	Authentication Port:	1812			
Admin Realms	Shared Secret:				
Admin Roles					
Users	Accounting Port:	1813	Port used for Radius accounting, if applicable		
User Realms	NAS-IP-Address:		IP address		
User Roles					
Maintenance					
System	Timeout:	30 seconds			
Import/Export	Retries:	0			
Archiving					
Troubleshooting	Users authenticate using tokens or one-time passwords Note: If you select this, the device will send the user's authentication method as "token" if you use SAML, and this credential will not be used in automatic SSO to backend applications.				

# 4. Enabling Challenge-Response (OTPprompt)

- 1. On your new RADIUS server settings page, scroll down to section Custom Radius Rules and click New Radius Rule... button.
- 2. In subsequent window configure (see example below):
- > Name i.e. OTPPromptRule
- > At Response Packet Type choose Access-Challenge.
- > At Attribute criteria:
- 2.1 Choose Reply-Message for Radius Attribute.
- 2.2 Operand must match the expression.
- 2.3 Value must be "(.\*)", without the quotes.
- 2.4 Click Add.

Name: OTPPromptRule			
If received Radius Response Packet			
Response Packet Type: Acces	ss Challenge 💌		
Attribute criteria:			
Radius Attribute	Operand	Value	
Reply-Message (18)	matches the expression		Add
Reply-Message	matches the expression	(.*)	×

- > Under then take action to select the Show Generic Login Page radio-button.
- > Click Save to complete configuring a new RADIUS server.

#### 5. Activate New RADIUS Server

- 1. In the left-hand menu, select User Realms -> Create New Authentication Realm.
- 2. In subsequent window configure (see example below):
- > Name i.e. OpenOTP Realm (this value will be shown in Realms drop-down on your login page).
- > For Authentication under Servers, choose RADIUS server created in previous steps (OpenOTP).
- > Click the Save Changes to complete configuring a new authentication realm.

Administrator Conso	le		
System			
Status	New Authentication Realm		
Configuration			
Network			
IF-MAP Federation			
Log/Monitoring	Name: OpenOTP Realm		
Authentication	Description:		
Signing In			
Endpoint Security	· · · · · · · · · · · · · · · · · · ·		
Auth. Servers			
Administrators	$\Box$ When editing, start on the Role Mapping page		
Admin Realms			
Admin Roles	Servers		
Users			
User Realms	Specify the servers to use for authentication and authorization. To create or manage servers, see the Servers page.		
User Roles			
Maintenance	Authentication: OpenOTP		
System			
Import/Export	Directory/Attribute: Same as above 🗸		
Archiving	Accounting: None V		
Troubleshooting			

- 3. In the left-hand menu, click Sign-In —> Sign-In Policies.
- 4. Select the Sign-In policy to which you like to tie the new Realm with, i.e. Default Sign-In Policy (/\*).
- 5. Select User Picks from a List of Authentication Realms under Authentication Realms (see example below):

- > From a list of Available Realms, add your new Authentication Realm to list of Selected Realms.
- > Click Save Changes and your Juniper/Pulse configuration is complete and you can start to log in by using OpenOTP.

Administrator Consol	e		
System			
Status	Signing In >		
Configuration	*/		
Network	/		
IF-MAP Federation	Save Changes		
Log/Monitoring			
Authentication			
Signing In	User type: 💿 Users 💿 Administrators		
Endpoint Security	Sign-in URL: */ Format: <host>/<path>/;</path></host>		
Auth. Servers			
Administrators	Description: Default User Sign In		
Admin Realms	$\sim$		
Admin Roles	Default Cirp In Dage Ad		
Users	Sign-in page: Default Sign-In Page  To create or manage pages, see Sign-In pages.		
User Realms	to create of manage pages, see order in pages.		
User Roles	Authentication realm		
Maintenance			
System	Specify how to select an authentication realm when signing in.		
Import/Export			
Archiving	$\bigcirc$ User types the realm name		
Troubleshooting	The user must type the name of one of the available authentication realms.		
	<ul> <li>User picks from a list of authentication realms         The user must choose one of the following selected authentication realms when they sign in. If only one realm is selected authentication page.     </li> <li>Available realms:         Selected realms:         OpenOTP Realm         Move Up     </li> </ul>		
	Remove     Move Down		

#### 🛕 Note

Don't forget to authorize the communication on 1812 UDP port (default RADIUS port for the authentication) from your Juniper-Pulse system to your WebADM instance at the firewall level.

## 6. Example Login

#### OTP Token Note

This chapter assumes you have already enrolled your token to OpenOTP, or that you are logging in with a Tokenless mode (i.e. SMS or Email OTP).

- 1. Go to your Juniper sign-in URL.
- 2. From Realm, drop-down choose the OpenOTP Authentication Realm.
- 3. Enter your domain login name and password:

	e <b>r</b> °	
Welcome t Secure	o the Access SSL VPN	
Username Password Realm	danield •••••• OpenOTP	Please sign in to begin your secure session.
	Sign In	

4. Page will refresh to prompt you to enter your OTP.

Welcome to the				
Secure Access SSL VPN				
Challenge / Response				
Challenge: Please enter your Authenticator code:				
Enter the challenge string above into your token, and t				
Response:				
Sign In Cancel				

# 5. Enter you OTP delivered to you via SMS, Email or provided by your OATH Token, Yubikey or similar device. You should be successfully logged in now!

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