

# Sentry SSO with Cisco ASA

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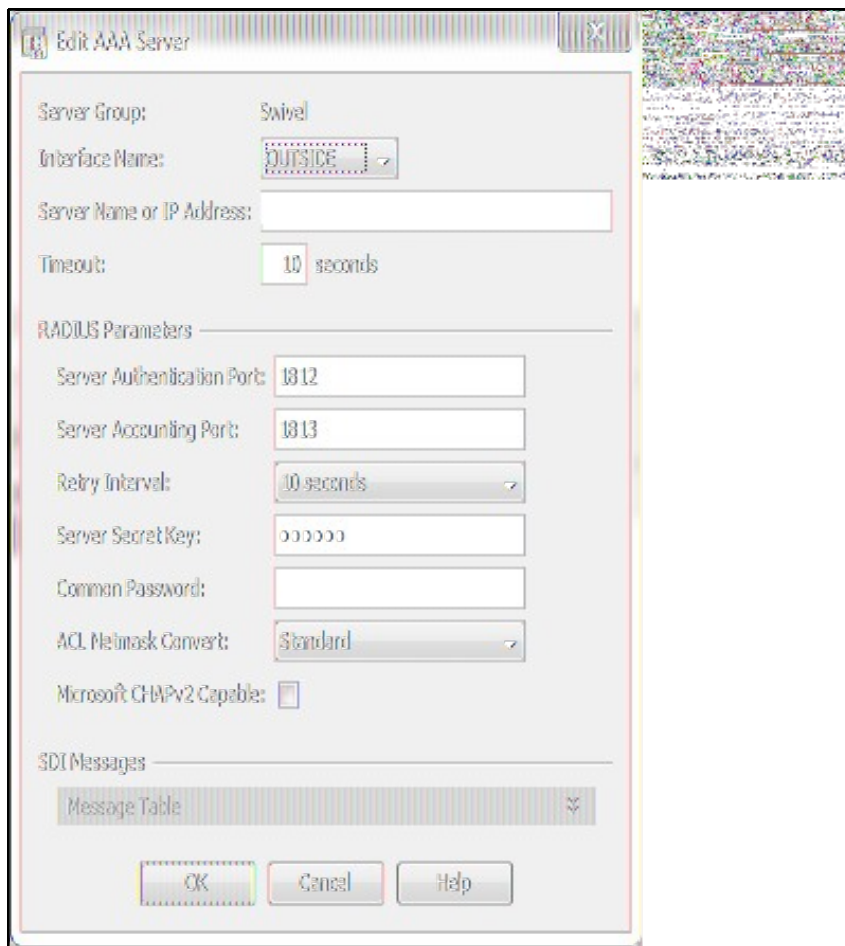
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## Introduction

This Document describes how to integrate a Cisco ASA with Swivel Sentry SSO. As Cisco ASA does not support SAML natively, this uses a custom login page to redirect to Sentry, and RADIUS to verify that the SAML claim is valid. Therefore, this solution is not suitable for use with AnyConnect.

## Configure Cisco ASA

The first step is to create a RADIUS authentication server group, and associate it with a connection profile. We do not go into details on this, as we presume the customer is familiar with configuring a Cisco ASA. However, please ensure that the server is set to match the Swivel IP address or host name. Note that the Swivel appliance doesn't support using a virtual IP address with RADIUS. Also, check that the ports match those on the Swivel RADIUS server (the defaults are 1812 and 1813, which should be correct). Make a note of the Server Secret Key used, as this will need to be entered on the Swivel server. Do not enable the **Microsoft CHAPv2 Capable** option.



The screenshot shows the 'Edit AAA Server' configuration window in Cisco ASA. The window is titled 'Edit AAA Server' and has a close button in the top right corner. The configuration is as follows:

- Server Group: Swivel
- Interface Name: OUTSIDE
- Server Name or IP Address: (empty field)
- Timeout: 10 seconds
- RADIUS Parameters:
  - Server Authentication Port: 1812
  - Server Accounting Port: 1813
  - Retry Interval: 10 seconds
  - Server Secret Key: (masked with dots)
  - Common Password: (empty field)
  - ACL Netmask Convert: Standard
  - Microsoft CHAPv2 Capable:
- SDI Messages:
  - Message Table: (dropdown menu)

At the bottom of the window, there are three buttons: OK, Cancel, and Help.

You will now need to customize the web page, as follows:

Cisco ASDM 7.6(1) for ASA -

File View Tools Wizards Window Help

Home Configuration Monitoring Save Refresh Back Forward Help

Device List Bookmarks Configuration > Remote Access VPN > Clientless SSL VPN Access > Portal > Customization

Device List

Add Delete Connect

Find: Go

Remote Access VPN

- Introduction
- Network (Client) Access
- Clientless SSL VPN Access
- Connection Profiles
- Portal
  - Bookmarks
  - Client-Server Plug-ins
  - Customization
  - Help Customization
  - Portal Access Rules
  - Port Forwarding
  - Smart Tunnels
  - Web Contents
- VDI Access
- Group Policies
- Dynamic Access Policies
- Advanced
- AAA/Local Users

Device Setup

Firewall

Remote Access VPN

Site-to-Site VPN

Device Management

Customization Objects

Configure Customization Objects that the security appliance displays for the Login page, Logout page, and main SSL portal page

This parameter is enforced by a [VPN group policy](#) or a [user policy](#) that controls the customization of the SSL VPN portal page, or a [connection profile](#) that controls the customization of the Login and Logout pages. You can click on Assign button to assign the selected one to them.

Add Edit Delete Import Export Assign

Customization	Group Policies/Connection Profiles/LOCAL Users Using the Customization
Template	Template
DfltCustomization	DfltCustomization
SwivelCustom	SwivelCustom

Find: Match Case

OnScreen Keyboard

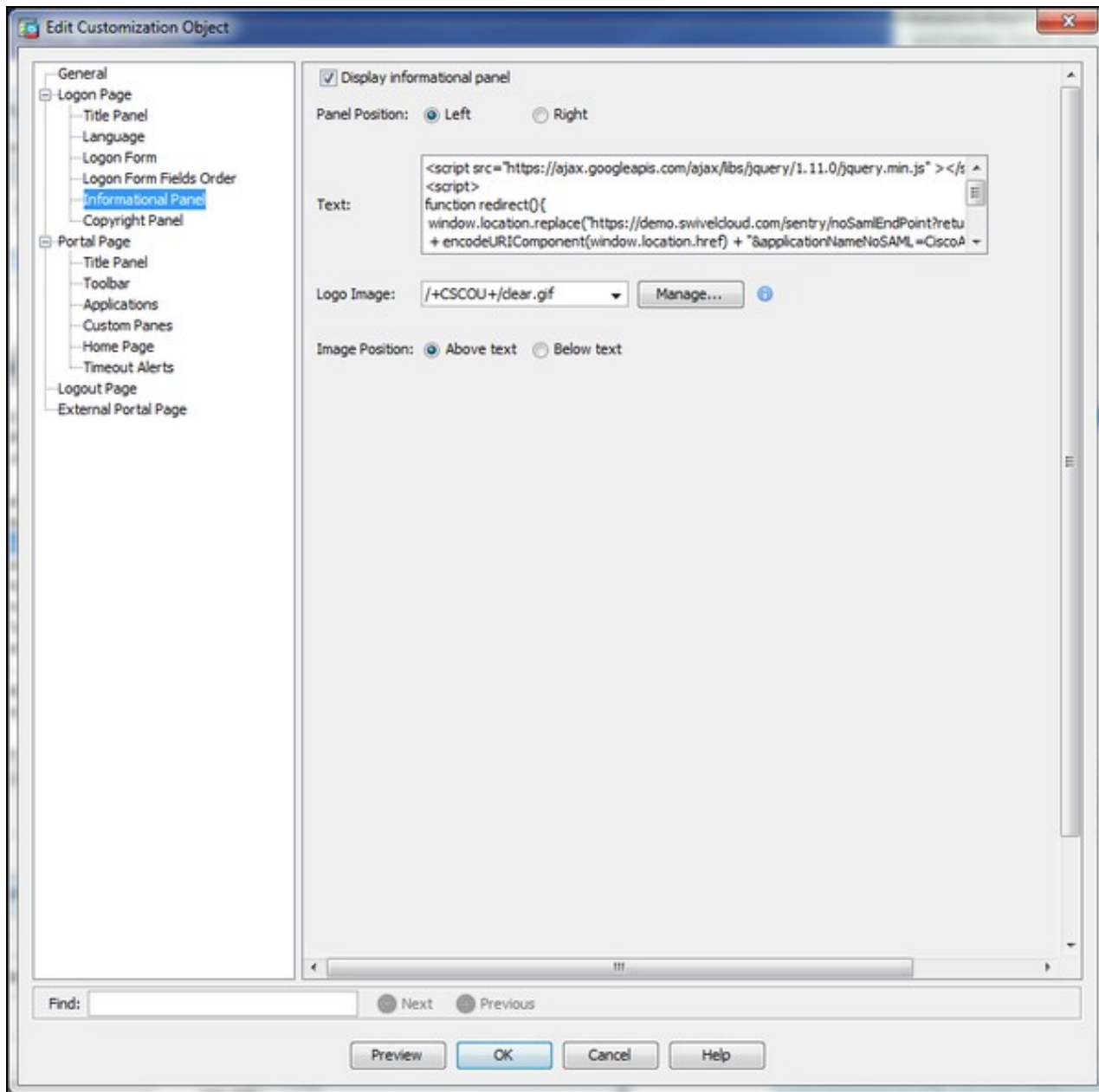
Specify when OnScreen Keyboard should be shown on portal pages.

- Do not show OnScreen Keyboard
- Show only for the login page
- Show for all portal pages requiring authentication

Apply Reset

swivel 15

Select the customization you intend to use, or create a new one. If you create a new one, make sure you associate it with the connection profile that uses the Swivel server, on the **General** tab.



Select **Informational Panel**. Make sure you check **Display informational panel**. Then paste the following code in the **Text** field:

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js" ></script>
<script>
function redirect() {
  window.location.replace("https://<swivel_server>/sentry/noSamlEndPoint?returnurlNoSAML="
    + encodeURIComponent(window.location.href) + "&applicationNameNoSAML=<EntityID>" );
}
var QueryString = function () {
  // This function is anonymous, is executed immediately and
  // the return value is assigned to QueryString!
  var query_string = {};
  var query = window.location.search.substring(1);
  var vars = query.split("&");
  for (var i=0;i<vars.length;i++) {
    var pair = vars[i].split("=");
    // If first entry with this name
    if (typeof query_string[pair[0]] === "undefined") {
      query_string[pair[0]] = pair[1];
    // If second entry with this name
    } else if (typeof query_string[pair[0]] === "string") {
      var arr = [ query_string[pair[0]], pair[1] ];
      query_string[pair[0]] = arr;
    // If third or later entry with this name
    } else {
      query_string[pair[0]].push(pair[1]);
    }
  }
  return query_string;
} ();

$(document).ready(function() {
  usernamePassedIn = QueryString["username"];
  passwordPassedIn = QueryString["password"];
  claimPassedIn = QueryString["claim"];
  if(typeof claimPassedIn == 'undefined') {
    redirect();
  }
});
```

```
} else {
  $('[name=password]').val(claimPassedIn);
  $('[name=username]').val(usernamePassedIn);
  // $('[name=user#2]').val(usernamePassedIn);
  // $('[name=password#2]').val(claimPassedIn);
  document.getElementById("unicorn_form").submit();
}
});
</script>
```

before you paste it, replace <swivel\_server> with the public host name of your Swivel Sentry server. Also, replace <EntityID> with the Entity ID of the Sentry application you create - see below.

Secondly, go to the **Logout Page** tab and enter the following code:

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js" ></script>
<script>
function redirect(){
  window.location.replace("https://<swivel_server>/sentry/singlelogout");
}
$(document).ready(function(){
  redirect();
});
</script>
```

Again, replace <swivel\_server> with the public host name of your Swivel Sentry server.

## Configure Swivel Sentry

Log into the Sentry administration console. Select **Applications**. Then click **Add Application** and select the type **RADIUS VPN - Cisco ASA**

Rules

Applications

Authentication Methods

View IdP Metadata

Keys

Users Active Sessions

User History

Log Viewer

General Configuration

Application Images

## RADIUS VPN Application



Note: The Endpoint URL is used only if it

Name

CiscoASA

Image

Cisco.png

Points

0

Portal URL

https://cisco.yourd

Endpoint URL

Entity ID

CiscoASA

Enter a name - it is recommended that the name is the same as the Entity ID below.

**Portal URL** should be the public URL of your Cisco server. It is recommended that you use the same address for **Endpoint URL**, although this will usually be overridden by the address sent by the Cisco login page.

**Entity ID** must be the same as the value shown as *<EntityID>* in the section above, so that Sentry will recognize the request as coming from this Cisco server.

## Configure RADIUS NAS on Swivel Core

You need to create a new NAS entry on the Swivel Core application. Log into the Swivel web admin console, and go to RADIUS -> NAS.

**swivelsecure** Swivel v4.0.3.4756 © 2016 Swivel Cloud Demo

- [Status](#)
- [Log Viewer](#)
- ▣ [Server](#)
- ▣ [Policy](#)
- ▣ [Logging](#)
- ▣ [Messaging](#)
- ▣ [Database](#)
- ▣ [Mode](#)
- ▣ [Repository](#)
- ▣ [RADIUS](#)
  - [Server](#)
  - [NAS](#)
- ▣ [Migration](#)
- ▣ [Windows GINA](#)
- ▣ [Appliance](#)
- ▣ [OATH](#)
- ▣ [Config Sync](#)
- ▣ [Reporting](#)
- [User Administration](#)
- [Save Configuration](#)
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- [Administration Guide](#)
- [Logout](#)

### RADIUS > NAS

Please enter the details for any RADIUS network access servers. A NAS is permitted to access the authentication services of the Swivel server via the RADIUS interface.

NAS:  [Juniper](#)  [Netscaler](#)

Identifier:

Hostname/IP:

Secret:

Group:

EAP protocol:

Authentication Mode:

Vendor (Groups):

Change PIN warning:

Two Stage Auth:

Allow blank password at Stage One:

Send Security String after Stage One:

Even if User has Valid String:

Check password with repository:

One Touch Enabled:

Authenticate non-user with just password:

Username attribute for repository:

Allow alternative usernames:

Alternative username attributes:

OTC timeout (mins):

Internal IP ranges:

Send username in challenge:

**Identifier** must be the same as the Entity ID from the Sentry application and the Cisco custom code, in order for authentication to succeed.

**Hostname/IP** should be the IP address (or hostname) of the Cisco ASA.

**Secret** must be the same as the one entered on the RADIUS server details on the Cisco.

Everything else should be left as default.

## SSO

For RADIUS VPN applications the login page will be displayed although Sentry has been configured with SSO enabled. That attribute just applies for SAML applications.

## **Known Issues/Limitations**

This method of authentication relies on the default policy for the Cisco portal requiring Swivel RADIUS authentication as the only authentication. It will not work if additional authentication is required, or if the user needs to select the Swivel authentication policy.

Because this method uses a custom login page, it cannot be used with AnyConnect or IPSEC - only with the Cisco ASA web login page.