

Duo for vBulletin v.3.4+, v.4.x

About

Homepage: http://mdvhosting.com/vbulletin/duo_security/

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vBulletin Plugin Version: v.3.1

Description: This package allows you to add Duo security functionality to your vBulletin community. Generally this is useful for administrators and moderators but depending on your community could have any number of uses.

Revision History

Date	Version	Author	Description
02/06/2013	v.3.0	Matt	Initial Revision
11/25/2013	v.3.1	Matt	Added a hashed key to the fetch_methods flow to help avoid exposure of user method/phone information.

Notes

- This vBulletin plugin was written for and tested on vBulletin v.3.4+ and vBulletin v.4.x. This plugin has not been tested on vBulletin v.5.x.
- This plugin uses the Dojo JavaScript Toolkit for a variety of JavaScript functions. Dojo is not included in this package as the plugin simply relies on a copy hosted by Google. More information about the Dojo Toolkit can be found at <http://dojotoolkit.org>.
- This plugin is written and documented in English. If you wish to use a different language on your forum, you may write your own translations for the plugin's phrases using vBulletin's built-in Language and Phrase management functions.
- If you wish to enroll a Duo user manually, please see the Manually Enrolling a User section below. There are special considerations to take into account when creating a user manually.

Prerequisites

- vBulletin v.3.4+, v.4.x
- PHP with cURL support
 - o PHP must be able to execute POST/GET requests to Duo's API using cURL (http/https)

First Steps

Before starting:

1. Sign up for a Duo account.
2. Read the Getting Started guide.
3. Create a new Auth API/REST integration in the Duo administrative interface.

- a. A note on the “New User Policy” option: If a user attempts to authenticate through Duo and they are not yet enrolled in Duo, the following will happen if the New User Policy is:
 - i. Require Enrollment – The user will be able to self-enroll and use Duo services.
 - ii. Deny Access – The user will be denied access. (Hint: Use this option if you want to manually enroll users and do not want them to enroll themselves.)
 - iii. Allow Access – The user will be allowed access without using Duo.

Note: Do not create Duo users yet. You will be guided on how to create them properly in the Manually Enrolling a User section below should you wish to create them manually.

Upload Plugin Files

First, download a copy of the vBulletin plugin. The plugin package will contain a variety of files including the vBulletin product file, images, REST API file, CSS style sheet, and documentation.

Note: If you are going to locate your image files somewhere other than the default directory, you will need to update the “duo_style.css” style sheet. Some of the images have hard-coded paths in this file which would need to be updated.

Upload the files in the “upload” directory to your web server. These files should be placed in your vBulletin installation’s root directory. For example, if vBulletin is installed in a directory called “forum” your Duo files should be in “forum/duo/”. If vBulletin is installed in your site’s root directory your Duo files should be in “duo/”.

Note: If you wish to locate the image files elsewhere, such as a separate image server, you can do so. Simply upload the images where you would like them and make a note of their location. Later, when we configure the Duo plugin, we’ll specify the image path.

Install the Duo Plugin

With the plugin files uploaded, we can now install the Duo plugin code in vBulletin.

1. In your vBulletin Admin Control Panel, expand the “Plugins & Products” menu group. Then, select “Manage Products”.
2. At the bottom of the “Manage Products” page, click “[Add/Import Product]”.
3. In the “Import Product” section, click the Browse button and locate the “product-duosecurity.xml” file. If you are updating from a previous version of this plugin, click “Yes” next to the “Allow Overwrite” option.
4. Finally, click the Import button. Once the Import is complete, you can proceed to plugin configuration.

Configuring the Duo Plugin

Configuring the Duo plugin is quite simple. You simply need the information from your Duo integration, the paths to the files you uploaded, and user or group information.

Note: Duo uses a secret key to encrypt communications between your server and Duo’s. This plugin also uses the secret key to ensure the integrity of data passed back to vBulletin is maintained. As

such, be very careful who you give access to your vBulletin options. The secret key is stored in these forum options and could be easily retrieved by an administrator with vBulletin options permissions.

1. In your vBulletin Admin Control Panel, expand the “vBulletin Options” menu group. Then, select “vBulletin Options”.
2. In the settings list, you should see an entry for “Duo Security”. Select this option and click Edit Settings.
3. You will now see the Duo Security settings page. Each option has a description of what its purpose is along with a sample value where appropriate. Here are some option-specific notes:
 - a. Duo Enabled Users – These are users who will be required to use Duo authentication regardless of their group memberships.
 - b. Duo Enabled Groups – Users in any of these groups will be required to use Duo authentication. We suggest creating a “Duo Security Users” group and simply adding it as an additional group for the users you want Duo enabled. You could also enable Duo for any of vBulletin’s built in groups.
4. Once you have filled in the options you wish the plugin to use, click Save.

Note: Before enabling the Duo plugin, ensure the values you entered are correct! If you enable Duo and the values are not correct, you could lock yourself out of your forum! We suggest creating a test user and only enabling Duo for that user initially to verify things are working correctly.

Manually Enrolling a User

If you do not want your users to enroll themselves for Duo services using self-enrollment, you can disable self-enrollment and manually provision users in Duo’s administration interface. To do so, follow the steps below:

1. First, verify enrollment is disabled in the Duo administration interface. In your integration’s properties, look for a “New User Policy” option. Set this to “Deny Access” if it isn’t already.
2. Now you will need the vBulletin user IDs for the users you wish to provision along with the phone number they want enrolled. It’s also beneficial to know what kind of phone number they are providing (Mobile or Landline), what operating system the phone uses if it’s a mobile phone (Apple iOS, Android, etc.), and whether or not they want to use the Duo Mobile application if it’s a smartphone.
3. Next, you need to know the forum prefix for your forum. This prefix is part of the Duo Security configuration under vBulletin options and is typically something like “bb1_”.
4. When you have the information above, log into the Duo security administration interface and click Users on the left. Then, click New User.
5. On the New User page, you will be asked for a username. The username is a combination of your forum prefix and the user’s vBulletin user ID. If your forum prefix is blank, simply enter the user’s ID. Here’s an example of a username including a forum prefix:

New User

◀ [Back to users](#)

Note: Users will normally enroll themselves and do not need to be added manually ([learn more about self-enrollment](#)). If you'd rather add users yourself, use this form.

Username

or [cancel](#)

6. After you click Add User, you will be presented with the rest of the options for a Duo user. Fill these options in as necessary and click Save Changes. We suggest putting the user's vBulletin username in the "Real Name" field so you can tell who is who.
7. Next, click the Add Phone button. Enter the phone number you were provided and click Add Phone.
8. Now you will see the rest of the phone options. Here you can fill in the device type (Mobile or Landline) and the platform if applicable (Apple iOS, Android, etc.). Once you have filled in these options, click Save Changes.
9. If the user is using a smartphone and wishes to use the Duo Mobile application (which we recommend to save telephony credits), then proceed to step 10. Otherwise, proceed to step **Error! Reference source not found..**
10. To enable Duo Mobile, click the Activate Duo Mobile link towards the top of the phone properties page. Then, click Generate Duo Mobile Activation code.
11. When asked if you want to send SMS instructions to the user, you generally should do so. These SMS messages will give the user information about installing the application and activating it.
12. User enrollment is now complete!

Customizing the Duo Pages

The Duo pages are fully customizable, assuming you have a knowledge of HTML, PHP, and CSS.

- The core page layout can be modified in "duo_rest.php" ("default" switch case)
- The factor list layout can be modified in "duo_rest.php" ("fetch_methods" switch case)
- The look and feel (colors, fonts, etc.) can be changed in the "duo_style.css" file

Note: Be careful when making changes to these files manually! A syntax error or malformed JavaScript can cause the plugin to stop functioning properly.

Tips and Tricks

Here are some tips which may come in handy while managing a Duo for vBulletin installation:

- When choosing Duo enabled users, you will need their user IDs. This ID can be found many different ways, here are some:
 - o View the user's profile and look at the URL:

- www.yoursite.com/member.php?u=12345
- www.yoursite.com/members/12345-username.html (With vbSEO)
- When choosing Duo enabled groups, you will need each group's ID. This ID can be found easily in the Admin Control Panel under Usergroups > Usergroup Manager.
 - For each group, in the actions drop box on the right, you should see "Edit Usergroup (id: X)". The number after "id:" is the group ID.

Troubleshooting

Below is table of common issues/errors and potential causes:

Issue/Error Message	Cause
Login request denied.	Your authentication request was pushed to Duo Mobile and the "Deny" button was pressed or your Duo account has been disabled.
Your account is not enrolled for Duo yet! Click here to continue to Duo enrollment. After enrollment, click here to continue.	Your vBulletin account is not associated with a Duo account and user self-enrollment is enabled. You can proceed to enrollment and then come back to the authentication flow to continue once enrollment is complete.
Could not contact Duo!	There was an issue contacting the Duo API server. This could be because of a firewall issue blocking your server's traffic to Duo or because of a bad integration configuration (integration key, secret key, or API host).
Authentication failed!	The Duo authentication request either timed out or the passcode supplied was not valid.
You chose to authenticate using a passcode but did not provide one!	You attempted to authenticate using a passcode (by clicking the Next button) but did not enter a passcode in the textbox.
Sorry, there was a failure getting your user ID.	There was an issue getting your user ID from vBulletin or from the previous stage of the authentication flow.
Invalid Transaction ID or User ID!	The transaction ID or user ID provided to the polling function was blank or not valid.
Sorry, Duo authentication is not available for your account.	Your account is not activated for Duo authentication and user self-enrollment is disabled. Your account will have to be manually enrolled with Duo.