



Institutional Investors Web Registration and Change Form

Use this form to authorize, change, or remove online user access to your entity's account on vanguard.com.

This form must be signed by the authorized signatory(ies) identified in Section 2 of the Vanguard Institutional Investors Organization Resolution on file with Vanguard.

Questions?
Call 800-998-2471.

We are happy to provide any assistance you need when filling out this form.

To establish first-time online access to your entity's plans, please complete:

- Section 1. Entity information
- Section 2. First-time registration
- Section 4. Authorization and signatures

To add, change, or remove online access to your entity's plans, please complete:

- Section 1. Entity information
- Section 3. Add, change, or remove access or users
- Section 4. Authorization and signatures

Important information regarding plan numbers:

Access to your account information on vanguard.com is driven by a plan number. A plan number is a five-digit (or alphanumeric) identifier assigned by Vanguard to group your accounts. Access to your entity's account information is provided at the plan level and extends to all mutual fund and brokerage accounts under that plan. If you need to confirm your plan number(s), please contact us.

For Vanguard Brokerage Services® (Vanguard Brokerage) accounts only: You must complete this form each time you open a new Vanguard Brokerage account.

Where noted in Section 2 and/or Section 3, each user on a Vanguard Brokerage account must check one or both boxes to indicate any associations or affiliations that apply. If the first box is checked, the user must include with this form a letter of account approval from the associated organization's compliance officer. Upon written request of the user's employer, we'll automatically send duplicate copies of confirmations, statements, or other information. Failure to include an approval letter may delay the processing of your form. An account approval letter isn't needed for FINRA, New York Stock Exchange, or Vanguard employees.

1. Entity information

Provide your
entity's full
legal name. >

*Name of entity	
*Entity's TIN	
*Street address or P.O. box	
Street address <i>line 2</i>	
*City, state, zip code	
*Authorized signatory to receive temporary user names <i>first, last</i>	
*Authorized signatory's email address	
*Authorized signatory's phone <i>area code, number, extension</i>	*Authorized signatory's fax <i>area code, number, extension</i>

* *Required information*

2. First-time registration

Complete this section to establish online access to your plan(s).

Please provide the information for all user(s) you would like to provide online access. Specify whether each user may access only certain plans or all plans for your entity and at what permission level ("view only" and "view and transact"). If you do not designate one or more permission levels, access will default to "view only." Permission levels will apply to all mutual fund and brokerage plan accounts.

"View only" access allows a user to view plan account information and transaction history for current and previous years.

"View and transact" access allows a user to:

- Obtain information on plan accounts.
- Buy, sell, and exchange assets in the entity's Vanguard plan accounts.
- Sell plan assets and have the redemption proceeds mailed in the entity's name only.
- Sell plan assets and have the redemption proceeds wired to a bank account already on file with Vanguard.
- Sell plan assets and have the redemption proceeds sent by EBT to a bank account already on file with Vanguard.
- View and download statements online.
- Access all plan statements and transaction history, including years prior to the user's appointment.

Note: Each permission level represents an independent level of plan account access. Please check all levels that apply.

User 1

Check all that apply. >

*Name <small>first, last</small>		
*Phone <small>area code, number, extension</small>		*Email address
Plans this user may access:	<i>View only</i>	<i>View and transact</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following plans		
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>

If you check this box, >
a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.)

<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.	
<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn't limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.	
Name of company	Trading symbol

* Required information

User 2

Check all that apply. >

If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.) >

*Name <i>first, last</i>		
*Phone <i>area code, number, extension</i>		*Email address
Plans this user may access:	<i>View only</i>	<i>View and transact</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following plans		
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.		
<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn't limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.		
Name of company		Trading symbol

* Required information

User 3

Check all that apply. >

If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.) >

*Name <i>first, last</i>		
*Phone <i>area code, number, extension</i>		*Email address
Plans this user may access:	<i>View only</i>	<i>View and transact</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following plans		
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.		
<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn't limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.		
Name of company		Trading symbol

* Required information

User 4

Check all that apply. >

If you check this box, >
 a letter of account
 approval is required for
 Vanguard Brokerage
 accounts.
 (Refer to page 1.)

*Name <i>first, last</i>		
*Phone <i>area code, number, extension</i>		*Email address
Plans this user may access:	<i>View only</i>	<i>View and transact</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following plans		
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.		
<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn't limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.		
Name of company		Trading symbol

* *Required information*

Photocopy this page to list additional users.

3. Add, change, or remove access or users

Complete this section to change access for an existing entity.

- If you are *adding* a new user, please specify the plan number and access level.
- If you are *adding* a plan for an existing user, please specify the plan number and access level.
- If you are *changing* an existing user’s access level, you must specify to which plans the changes apply. You may change a user’s access level for all plans by checking the “all plans for this entity” box and updating the access level. You may change a user’s access level for a specific plan by checking “only the following” and providing the plan number(s). If you are changing a user’s access level for a specific plan and the user has access to additional plans, the user’s access level for all additional plans will remain intact.
- If you are *removing* an existing user’s access, you must specify from which plans the user should be removed. If you do not list a plan number, the user’s access to all plans will be deactivated.
- All existing users will retain plan account access unless you provide instructions to modify or remove their access in this section.

Note: Each permission level represents an independent level of plan account access. Please check all levels that apply. See Section 2 for a description of permission levels.

User 1

*Name <small>first, last</small>					
*Phone <small>area code, number, extension</small>			*Email address		
Plans this user may access:	New access		Change/remove access		
	<i>View only</i>	<i>View and transact</i>	<i>View only</i>	<i>View and transact</i>	<i>Remove</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following					
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.					
<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn’t limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.					
Name of company				Trading symbol	

Check all that apply. >

If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.) >

* Required information

User 2

*Name <small>first, last</small>					
*Phone <small>area code, number, extension</small>			*Email address		
Plans this user may access:	New access		Change/remove access		
	<i>View only</i>	<i>View and transact</i>	<i>View only</i>	<i>View and transact</i>	<i>Remove</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following					
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.					
<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn't limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.					
Name of company				Trading symbol	

Check all that apply. >

If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.) >

* Required information

User 3

*Name <i>first, last</i>					
*Phone <i>area code, number, extension</i>			*Email address		
Plans this user may access:	New access		Change/remove access		
	<i>View only</i>	<i>View and transact</i>	<i>View only</i>	<i>View and transact</i>	<i>Remove</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following					
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Check this box if you are 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.					
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Name of company				Trading symbol	

Check all that apply. >

If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.) >

* Required information

User 4

*Name <small>first, last</small>					
*Phone <small>area code, number, extension</small>			*Email address		
Plans this user may access:	New access		Change/remove access		
	<i>View only</i>	<i>View and transact</i>	<i>View only</i>	<i>View and transact</i>	<i>Remove</i>
<input type="checkbox"/> All plans for this entity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Only the following					
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Plan number</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.)					
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<input type="checkbox"/> Check this box if you are, or if a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but isn't limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.					
Name of company				Trading symbol	

Check all that apply. >

If you check this box, a letter of account approval is required for Vanguard Brokerage accounts. (Refer to page 1.) >

* Required information

Photocopy this page to list additional users.

4. Authorization and signatures

Please review the following carefully.

- This form must be signed by authorized signatory(ies) identified in Section 2 of the Vanguard Institutional Investors Organization Resolution Form.
- The authorized signatory listed in Section 1 of this form will be given a temporary individual user name for each new user designated in Section 2 and/or Section 3 of this form (temporary passwords will be emailed directly to each user).

By completing and signing this form, the Vanguard Institutional Investors Web Registration and Change Form, you understand and agree that:

You, on behalf of the entity identified in Section 1 of this form, are authorizing The Vanguard Group, Inc. and Vanguard Marketing Corporation, and their affiliates (collectively, "Vanguard") to give the user(s) named in Section 2 and Section 3 the online access level(s) described and selected in those Sections. The entity named in Section 1 has authorized you to give Vanguard such instruction, and Vanguard is authorized to act on your instruction.

Each user(s) has been duly authorized by the entity to register for, and use, the online access described and selected in Section 2 and Section 3.

The online access granted to a user will remain active until that user's online access is changed or revoked by an authorized signatory (as reflected on the then current Vanguard Institutional Investors Organization Resolution on file at Vanguard), with such change or revocation effective only when Vanguard: 1) receives notice of the change or revocation on a new, originally signed Vanguard Institutional Investors Web Registration and Change Form, or receives notice of a change or revocation in such other form and manner as Vanguard, in its sole discretion, deems acceptable; and, 2) Vanguard has had a reasonable period of time to act upon such notice of change or revocation. Any change or revocation of a user's online access as described in this Vanguard Institutional Investors Web Registration and Change Form does not automatically change or revoke that person's authority, if any, that was granted by any other instruction, form or document (such as, but not limited to, a Vanguard Institutional Investors Organization Resolution, Agency Agreement, or Account Agreement).

Vanguard will provide the authorized signatory named in Section 1 with temporary user names, and the users identified in Sections 2 and 3 with temporary password(s), that users must enter on vanguard.com to register for access. Vanguard will send the temporary password(s) to the email address(es) provided for each user in Sections 2 and 3. It is the responsibility of the authorized signatory and/or the user to keep user names and passwords secure and protected from misuse.

You agree to indemnify and hold The Vanguard Group, Inc. and Vanguard Marketing Corporation, and each of the investment company members of The Vanguard Group, and their affiliates, and their respective officers, employees, and agents (collectively, "the Vanguard entities") harmless from and against all losses, claims and expenses (including attorney's fees) of any kind incurred by the Vanguard entities for relying in good faith upon information provided in this form, for providing users with the online access levels authorized on this form, and for acting on instructions believed by Vanguard to have originated from any user. Any change or revocation of a user's access will not affect liability resulting from transactions initiated before Vanguard has received notice of the change or revocation and has had a reasonable period of time to act upon the change or revocation.

The following applies to organizations that may engage in option trading in a Vanguard Brokerage account:

Users understand the investment objectives and trading plans of the registered account owner and will only use trading strategies that are consistent with those objectives and plans.

I/We acknowledge that users have received from the registered account owner (or already possess) copies of the Vanguard Brokerage Option Application and Vanguard Brokerage Option Account Agreement (Option Agreement), and each has read and understands those documents. If the registered account owner is approved for option trading, the owner will be sent the booklet, Characteristics and Risks of Standardized Options. I/We agree that users will read that booklet prior to conducting any trades in the owner's account.

I/We acknowledge that users have received a copy of the Option Agreement, which contains a predispute arbitration clause highlighted in paragraphs 14 and 15 on page 3. By signing this form, I/we agree that I/we have the authority to bind users to the terms and conditions of the Option Agreement and that users will be bound to the terms and conditions of the Option Agreement.

Please sign here. >

* Name of entity	
* Name of authorized signatory <small>type or print</small>	
* Signature of authorized signatory	Date: <i>mm/dd/yyyy</i>
Name of authorized signatory <small>type or print</small>	
Signature of authorized signatory	Date: <i>mm/dd/yyyy</i>

* Required information

Reminders: If any required information is missing, your request will not be completed.

- Entity information in Section 1.
- User information for each user specified in Sections 2 or 3.
- All appropriate signatures in Section 4.

For Vanguard Brokerage accounts only:

If any user is 1) an employee of FINRA or 2) associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer, you must attach a letter of account approval from the associated organization’s compliance officer. Upon written request of the user(s), we’ll automatically send them duplicate copies of confirmations, statements, or other information. Failure to include an approval letter may delay the processing of your form. An account approval letter isn’t needed for FINRA, New York Stock Exchange, or Vanguard employees.

Mailing information

Mail your completed form and any other required documents to:

If you do not have a postage-paid envelope, mail to: > **Vanguard
P.O. Box 1110
Valley Forge, PA 19482-1110**

For overnight delivery, mail to: > **Vanguard
100 Vanguard Boulevard, Mailstop 236
Malvern, PA 19355**