

Manage permissions and security in SharePoint

As a site owner, you can control who can and cannot see your SharePoint site. For easiest administration, begin by using the standard SharePoint groups: **Owners**, **Members**, and **Visitors**. We recommend that you make most users members of the **Visitors** or **Members** groups. **Members** can contribute to the site, adding or removing items, but cannot change the structure of the site or change site settings.

You can also create additional groups and permission levels if you need finer control over the actions that your users can take. If there are particular lists, libraries, folders, etc. that contain sensitive data that must be extra secure, you can use fine-grained permissions to grant specific permissions to specific groups or individual users.

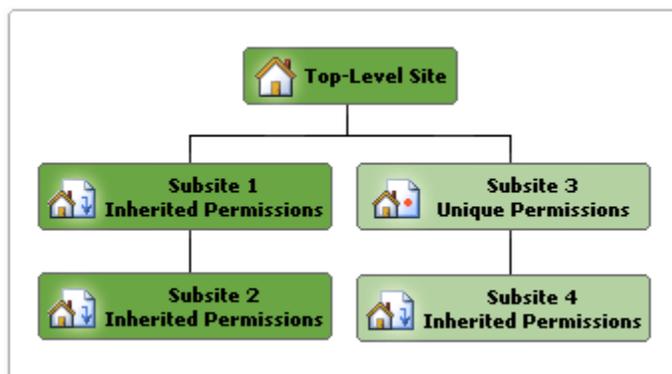
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Hierarchy and inheritance

By default, permissions on lists, libraries, folders, etc. are inherited from their parent site. You can, however, break this inheritance for any secure object at a lower level in the hierarchy by editing the permissions (that is, creating a unique permission assignment) on that secure object.

Websites themselves are securable objects on which permissions can be assigned. You can configure sub-sites to inherit permissions from a parent site or break the inheritance and create unique permissions for a particular site. Inheriting permissions is an easy way to manage a group of websites; however, if a sub-site manages permissions from its parent, that set of permissions is shared. This means that owners of sub-sites that inherit permissions from the parent site can edit the permissions of the parent. Ensure that any changes you make to the permissions on the parent site are appropriate for the parent site and all sub-sites that inherit those permissions.

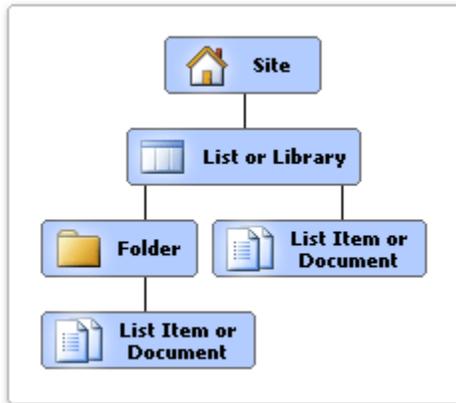


In the above image:

- **Subsite 1** inherits permissions from the Top-Level Site. This means that changes made to SharePoint groups and permission levels on the Top-Level Site also affect Subsite 1.
- **Subsite 2** is also inheriting permissions from its parent (Subsite 1). However, because Subsite 1 is also inheriting permissions from its parent, changes made to SharePoint groups and permissions levels on the Top-Level Site affect Subsite 2 also. This is because you cannot manage permissions on a sub-site that is inheriting permissions. Instead, you either manage the permissions of the parent (i.e. Top-Level Site) or you break the inheritance and create unique permissions.
- **Subsite 3** has unique permissions. This means that it does not inherit permissions from its parent site. Therefore, any changes made to the permission levels and SharePoint groups on Subsite 3 do not affect its parent site.

- **Subsite 4** is inheriting permissions from Subsite 3, so any changes to permission levels or SharePoint groups on Subsite 3 affect both sites.

Each site contains additional securable objects which have a particular position in the site hierarchy, as shown here:



Lower-level securable objects automatically inherit permissions from their parent. For example, a list or library inherits permissions from the site, and list items and documents inherit permissions from the list, library, or folder that contains them. You can break this inheritance at any point in the hierarchy and assign unique permissions. When you break the inheritance from the parent, the securable object from which you broke the inheritance receives a copy of the parent's permissions. You can then edit those permissions to be unique, meaning that any changes you make to the permissions on that securable object do not affect the parent.

Plan for permission inheritance

It is easiest to manage permissions at only the site level, whenever possible. This means you should create your site hierarchy in a way that allows you to assign permissions to sites that are appropriate to all securable objects within the site, such as lists, libraries, folders within lists or libraries, documents, and items. Although you can assign unique permissions on any securable object in the site hierarchy, to do so is more cumbersome than inheriting permissions. It gets more difficult when some lists or libraries within a site have fine-grained permissions applied or when some sites have sub-sites with unique permissions and some with inherited permissions.

As much as possible, arrange sites, sub-sites, lists, and libraries so that they can inherit most permissions. Put sensitive data into separate sub-sites, lists, libraries, and so on.

For example, it is much easier to manage permissions using a hierarchy like the one shown in the following example, rather than mixing sensitive and non-sensitive data in the same sites, lists, and libraries.

- **Site A** Group homepage
 - **List A** Non-sensitive data (inherited permissions)
 - **Document Library A** Non-sensitive data (inherited permissions)
 - **Sub-site B** Sensitive data (unique permissions)
 - **List B** Sensitive data (unique permissions)
 - **Document Library B** Sensitive data (unique permissions)

Notice that the list and library in Site A contain non-sensitive data and Sub-site B was created below Site A to contain a list and library for storing sensitive data. In this scenario, you can assign permissions to Site A that are appropriate to List A and Document Library A and create unique permissions on Sub-site B which are appropriate for List B and Document Library B.

Permission levels and types

SharePoint by default includes **five permission levels** (“permission level” meaning a set of permissions that can be granted to users or SharePoint groups on an entity such as a site, library, list, folder, item, or document). Each of these permission levels has specific **permissions** associated with it (“permission” meaning authorization to perform specific actions such as viewing pages, opening items, and creating sub-sites).

Note: Prior to SharePoint 3.0, permission levels were called **site groups** and SharePoint groups were called **cross-site groups**.

As a site owner, you can choose which permissions are associated with these permission levels (except for the **Limited Access** and **Full Control** permission levels) or add new permission levels to combine different sets of permissions. You can associate permissions with permission levels and also associate permission levels with users and SharePoint groups. Users and SharePoint groups are associated with securable objects such as sites, lists, list items, libraries, folders within lists and libraries, and documents.

The following tables list and describe the permission levels that you can assign to users and SharePoint groups and the permissions you can assign to permission levels. For each permission, the associated permission level is listed by default. Any permissions dependent on it are listed, as well as any default permission levels that include the permission.

Permission Level	Description
Full Control	This permission level contains all permissions. Assigned to the <i>Site name</i> Owners SharePoint group, by default. This permission level cannot be customized or deleted.
Design	Can create lists and document libraries, edit pages and apply themes, borders, and style sheets in the Web site. Not assigned to any SharePoint group, by default.
Contribute	Can add, edit, and delete items in existing lists and document libraries. Assigned to the <i>Site name</i> Members SharePoint group, by default.
Read	Read-only access to the Web site. Users and SharePoint groups with this permission level can view items and pages, open items, and documents. Assigned to the <i>Site name</i> Visitors SharePoint group, by default.
Limited Access	<p>The Limited Access permission level is designed to be combined with fine-grained permissions to give users access to a specific list, document library, item, or document, without giving them access to the entire site. However, to access a list or library, for example, a user must have permission to open the parent Web site and read shared data such as the theme and navigation bars of the Web site. The Limited Access permission level cannot be customized or deleted.</p> <p>Note You cannot assign this permission level to users or SharePoint groups. Instead, Windows SharePoint Services 3.0 automatically assigns this permission level to users and SharePoint groups when you grant them access to an object on your site that requires that they have access to a higher level object on which they do not have permissions. For example, if you grant users access to an item in a list and they do not have access to the list itself, Windows SharePoint Services 3.0 automatically grants them Limited Access on the list, and also the site, if needed.</p>

List, site, and personal permissions

Windows SharePoint Services 3.0 includes 33 permissions, which are used in the five default permission levels. You can change which permissions are included in a particular permission level (except for the Limited Access and Full Control permission levels) or create a new permission level to contain a specific set of permissions that you specify.

Permissions are categorized as list permissions, site permissions, and personal permissions, depending upon the objects to which they can be applied. For example, site permissions apply to a particular site, list permissions apply only to lists and libraries, and personal permissions apply only to things like personal views, private Web Parts, etc. The following tables show permissions and the permission levels they are assigned to, by default.

List permissions

Permission	Full Control	Design	Contribute	Read	Limited Access
Manage Lists	X	X			
Override Check-Out	X	X			
Add Items	X	X	X		

Edit Items	X	X	X		
Delete Items	X	X	X		
View Items	X	X	X	X	
Approve Items	X	X			
Open Items	X	X	X	X	
View Versions	X	X	X	X	
Delete Versions	X	X	X		
Create Alerts	X	X	X	X	
View Application Pages	X	X	X	X	X

Site permissions

Permission	Full Control	Design	Contribute	Read	Limited Access
Manage Permissions	X				
View Usage Data	X				
Create Subsites	X				
Manage Web Site	X				
Add and Customize Pages	X	X			
Apply Themes and Borders	X	X			
Apply Style Sheets	X	X			
Create Groups	X				
Browse Directories	X	X	X		
Use Self-Service Site Creation	X	X	X	X	
View Pages	X	X	X	X	
Enumerate Permissions	X				
Browse User Information	X	X	X	X	X
Manage Alerts	X				
Use Remote Interfaces	X	X	X	X	X
Use Client Integration Features	X	X	X	X	X
Open	X	X	X	X	X
Edit Personal User Information	X	X	X		

Personal permissions

Permission	Full Control	Design	Contribute	Read	Limited Access
Manage Personal Views	X	X	X		
Add/Remove Private Web Parts	X	X	X		
Update Personal Web Parts	X	X	X		

View permissions for users and groups associated with a list or library

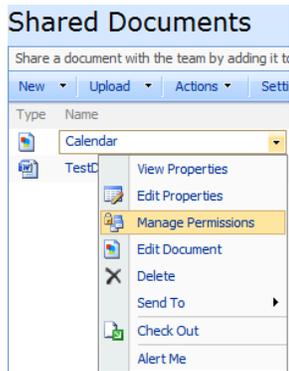
Any user with the **Manage Permissions** permission on a particular securable object, such as a list, library, folder within a list or library, document, or list item can manage permissions on that particular securable object. By default, **Site Owners** have the **Manage Permissions** permission. Any user with the **Full Control** permission level on a particular securable object can also manage permissions on that securable object.

1. Open the list or library in which you want to view users and SharePoint groups.
2. On the **Settings** menu, click **Document Library Settings** or **List Settings**.
3. On the **Customize** page, under **Permissions and Management**, click **Permissions for this document library** or **Permissions for this list**.
4. The permissions for that list or library will be displayed.

View permissions for users and groups associated with a folder, document, or list item

1. Open the list or library that contains the folders, documents, or list item for which you want to view users and SharePoint groups.

2. Move the mouse pointer so that it hovers on the folder, document, or list item. Click the arrow that appears and select **Manage Permissions** from the drop-down list.

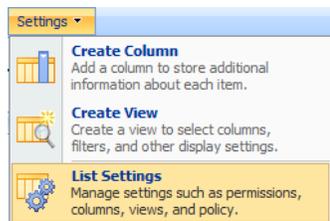


3. The permissions for that item will be displayed.

Assign user permissions to a list or library

If the securable object you are configuring is using unique permissions, you can also add users or groups directly to the securable object with the permissions you want. If permissions are being inherited from the parent securable object, you cannot add users or groups directly to the securable object. In this case, you can only add users to existing SharePoint groups; however, if you create unique permissions for the securable object, you can then add users.

1. Open the list or library in which you want to add users or SharePoint groups.
2. On the **Settings** menu, click **Document Library Settings** or **List Settings**.



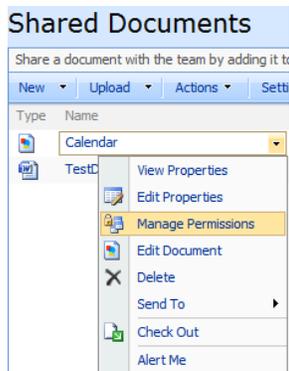
3. Under **Permissions and Management**, click **Permissions for this document library** or **Permissions for this list**.
4. The permissions for that list or library will be displayed. Note that if checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object. In this case, users and groups that you add are also added to the parent. If unique permissions are being used (i.e. not inheriting from the parent), users and groups that you add to this securable object only affect this securable object and any other entities that inherit permissions from this securable object.
5. On the **New** menu, click **Add Users**.
 - The **New** menu does not appear if the list or library inherits permissions from its parent site. In this case, on the **Actions** menu, click **Edit Permissions** and then click **OK** to confirm that you want to create unique permissions.
6. In the **Add Users** section, specify the users and SharePoint groups that you want to add to this securable object.
7. In the **Give Permissions** section, either add the users to an existing SharePoint group or give them permission directly to the securable object and select one or more of the checkboxes to specify permissions.
 - If permissions are being inherited from the parent securable object, you cannot add users or SharePoint groups directly to this securable object. Rather, you can only add users to an existing SharePoint group.

- You cannot add a SharePoint group to another SharePoint group. If you added a SharePoint group in step 6, you must select **Give users permission directly**.
8. Click **OK**.

Assign user permissions to a folder, document, or list item

If the securable object you are configuring is using unique permissions, you can also add users or groups directly to the securable object with the permissions you want. If permissions are being inherited from the parent securable object, you cannot add users or groups directly to the securable object. In this case, you can only add users to existing SharePoint groups; however, if you create unique permissions for the securable object, you can then add users.

1. Open the list or library that contains the folder, document or list item on which you want to add users or SharePoint groups.
2. Move the mouse pointer so that it hovers on the folder, document, or list item. Click the arrow that appears and select **Manage Permissions** from the drop-down list.

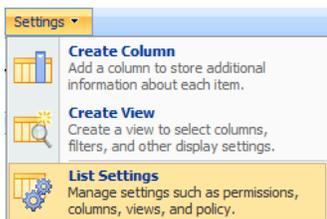


3. The permissions for that item will be displayed.
4. Under **Permissions and Management**, click **Permissions for this document library** or **Permissions for this list**.
5. The permissions for that item will be displayed. Note that if checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object. In this case, users and groups that you add are also added to the parent. If unique permissions are being used (i.e. not inheriting from the parent), users and groups that you add to this securable object only affect this securable object and any other entities that inherit permissions from this securable object.
6. On the **New** menu, click **Add Users**.
 - The **New** menu does not appear if the list or library inherits permissions from its parent site. In this case, on the **Actions** menu, click **Edit Permissions** and then click **OK** to confirm that you want to create unique permissions.
7. In the **Add Users** section, specify the users and SharePoint groups that you want to add to this securable object.
8. In the **Give Permissions** section, either add the users to an existing SharePoint group or give them permission directly to the securable object and select one or more of the checkboxes to specify permissions.
 - If permissions are being inherited from the parent securable object, you cannot add users or SharePoint groups directly to this securable object. Rather, you can only add users to an existing SharePoint group.
 - You cannot add a SharePoint group to another SharePoint group. If you added a SharePoint group in step 7, you must select **Give users permission directly**.
9. Click **OK**.

Create a new SharePoint group from a list or library

This procedure can only be performed from a list or library that is inheriting permissions from its parent site. Regardless of your starting point, all SharePoint groups are created on the site collection level. This means that all SharePoint groups are available to all sites within the site collection.

1. Open the list or library in which you to create a new SharePoint groups.
2. On the **Settings** menu, click **Document Library Settings** or **List Settings**.



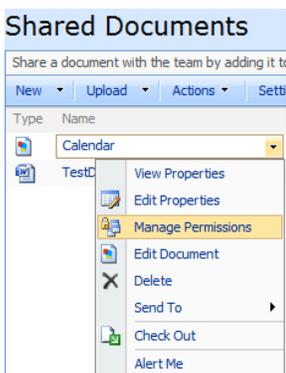
3. Under **Permissions and Management**, click **Permissions for this document library** or **Permissions for this list**.
4. The permissions for that list or library will be displayed.
5. On the **New** menu, click **New Group**.
6. On the **New Group** page, specify the settings for your new SharePoint group, including the permission levels that you want to assign to it. Then click **Create**.

After creating the new group, you can go to the People and Groups page where you can add users to your new group.

Create a new SharePoint group from a folder, document, or list item

This procedure can only be performed from a list or library that is inheriting permissions from its parent site. Regardless of your starting point, all SharePoint groups are created on the site collection level. This means that all SharePoint groups are available to all sites within the site collection.

1. Open the list or library that contains the folder, document or list item on which you want to add a SharePoint group.
2. Move the mouse pointer so that it hovers on the folder, document, or list item. Click the arrow that appears and select **Manage Permissions** from the drop-down list.



3. The permissions for that item will be displayed.
4. If the list or library is inheriting permissions from the parent, go to the **Actions** menu and click **Manage Permissions of Parent**. Otherwise, you cannot create a SharePoint group from this list or library.
5. On the **New** menu, click **New Group**.
6. On the **New Group** page, specify the settings for your new SharePoint group, including the permission levels that you want to assign to it. Then click **Create**.

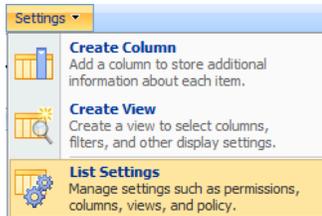
After creating the new group, you can go to the People and Groups page where you can add users to your new group.

Edit permission assignments on permission levels on a list or library

Use the following steps to edit the permission assignments for permission levels of selected users and SharePoint groups associated with a list or library. Note that if the securable object on which you are editing permission levels is inheriting permissions from a parent securable object, performing the following steps breaks this inheritance.

At a later time, you can choose to re-inherit permissions from the parent securable object. Note that inheriting permissions from the parent discards any unique permissions that may have been created for this securable object, such as unique SharePoint groups or permission level assignments that was created at this securable object while using unique permissions.

1. Open the list or library on which you want to edit permission levels.
2. On the **Settings** menu, click **List Settings** or **Document Library Settings**.



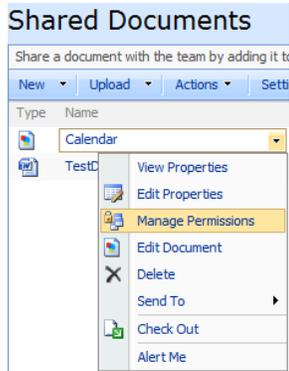
3. In the **Permissions and Management** column, click **Permissions for this list** or **Permissions for this document library**.
4. The permissions for that item will be displayed. Checkboxes appear next to the **Users/Groups** column if unique permissions are being used for this securable object. If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object.
5. If your list or library is inheriting permissions, you must first stop inheriting permissions to edit permission levels on this securable object. To do this, on the **Actions** menu, click **Edit Permissions**, and then click **OK** to confirm.
6. Select the checkboxes for the users and SharePoint groups on which you want to edit permission levels on this securable object.
7. On the **Actions** menu, click **Edit User Permissions**.
8. In the **Choose Permissions** section, select the permission levels you want, clear those you do not want, and then click **OK**.

Edit permission assignments on permission levels on a folder, document, or list item

Use the following steps to edit the permission assignments for permission levels of selected users and SharePoint groups associated with a list or library. Note that if the securable object on which you are editing permission levels is inheriting permissions from a parent securable object, performing the following steps breaks this inheritance.

At a later time, you can choose to re-inherit permissions from the parent securable object. Note that inheriting permissions from the parent discards any unique permissions that may have been created for this securable object, such as unique SharePoint groups or permission level assignments that were created at this securable object while using unique permissions.

1. Open the list or library on which you want to edit permission levels.
2. Move the mouse pointer so that it hovers on the folder, document, or list item. Click the arrow that appears and select **Manage Permissions** from the drop-down list.

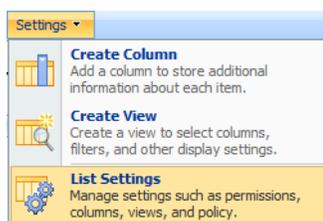


3. The permissions for that item will be displayed. Checkboxes appear next to the **Users/Groups** column if unique permissions are being used for this securable object. If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object.
4. If your item is inheriting permissions, you must first stop inheriting permissions to edit permission levels on this securable object. To do this, on the **Actions** menu, click **Edit Permissions**, and then click **OK** to confirm.
5. Select the checkboxes for the users and SharePoint groups on which you want to edit permission levels on this securable object.
6. On the **Actions** menu, click **Edit User Permissions**.
7. In the **Choose Permissions** section, select the permission levels you want, clear those you do not want, and then click **OK**.

Break permission inheritance on a list or library

By default, lists and libraries inherit permissions from the parent site. Follow these steps if you want to break this inheritance and create unique permissions on a particular list or library:

1. Open the list or library on which you want to break inheritance from the parent securable object.
2. On the **Settings** menu, click **List Settings** or **Document Library Settings**.



3. In the **Permissions and Management** column, click **Permissions for this list** or **Permissions for this document library**.
4. The permissions for that item will be displayed. Checkboxes appear next to the **Users/Groups** column if unique permissions are being used for this securable object. If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object.
5. On the **Actions** menu, click **Edit User Permissions**. Click **OK** to confirm the action. Note that the **Edit Permissions** option is not available on the **Actions** menu if this securable object has unique permissions that are not being inherited from the parent securable object.

At a later time, you can choose to re-inherit permissions from the parent securable object. Note that inheriting permissions from the parent discards any unique permissions that may have been created for this securable object, such as unique SharePoint groups or permission level assignments that were created at this securable object while using unique permissions.

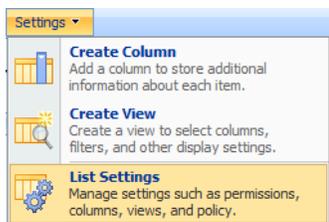
Note that all unique permission level assignments are also discarded from folders in the lists and libraries, list items, and documents within the list or library when you choose to re-inherit permissions.

Inherit permissions for a list or library

By default, lists and libraries inherit permissions from the parent site. However, this inheritance can be broken to create unique permissions on a particular securable object. You can re-inherit permissions at any time. Use the following steps to re-inherit permissions from the parent securable object for a list or library that is currently using unique permissions that are not inherited from the parent.

Note: Inheriting permissions from the parent discards any unique permissions that may have been created for this securable object.

1. Open the list or library on which you want to break inheritance from the parent securable object.
2. On the **Settings** menu, click **List Settings** or **Document Library Settings**.



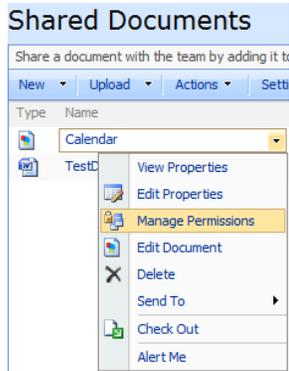
3. In the **Permissions and Management** column, click **Permissions for this list** or **Permissions for this document library**.
4. The permissions for that item will be displayed. Checkboxes appear next to the **Users/Groups** column if unique permissions are being used for this securable object. If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object.
5. On the **Actions** menu, click **Inherit Permissions**. Click **OK** to confirm the action. Note that the **Inherit Permissions** option is not available on the **Actions** menu if permissions are already being inherited from the parent.

Inherit permissions for a folder, document, or list item

By default, lists and libraries inherit permissions from the parent site. However, this inheritance can be broken to create unique permissions on a particular securable object. You can re-inherit permissions at any time. Use the following steps to re-inherit permissions from the parent securable object for a list or library that is currently using unique permissions that are not inherited from the parent.

Note: Inheriting permissions from the parent discards any unique permissions that may have been created for this securable object.

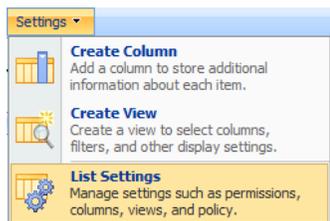
1. Open the list or library on which you want to edit permission levels.
2. Move the mouse pointer so that it hovers on the folder, document, or list item. Click the arrow that appears and select **Manage Permissions** from the drop-down list.



3. The permissions for that item will be displayed. Checkboxes appear next to the **Users/Groups** column if unique permissions are being used for this securable object. If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object.
4. On the **Actions** menu, click **Inherit Permissions**. Click **OK** to confirm the action. Note that the **Inherit Permissions** option is not available on the **Actions** menu if permissions are already being inherited from the parent.

Remove user permissions from a list or library

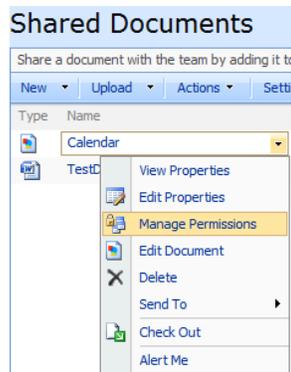
1. Open the list or library on which you want to break inheritance from the parent securable object.
2. On the **Settings** menu, click **List Settings** or **Document Library Settings**.



3. In the **Permissions and Management** column, click **Permissions for this list** or **Permissions for this document library**.
4. The permissions for that item will be displayed.
 - If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object. If permissions are being inherited, you cannot remove users at this securable object. If you want to delete users and groups from the parent securable object (which this securable object inherits permissions from), you must manage the permissions of the parent.
5. Perform one of the following:
 - To manage the permissions of the parent, click on the **Actions** menu and select **Manage Permissions of Parent**.
 - If you are currently inherited permissions from the parent and want to break this inheritance and create unique permissions for this object, click on the **Actions** menu and select **Edit Permissions**. Click **OK** to confirm the action.
 - If the list or library is already using unique permissions that are not inherited, select the checkbox for the users and SharePoint groups that you want to remove from this list or library. On the **Actions** menu, click **Remove User Permissions**. Click **OK** to confirm the action.

Remove user permissions from a folder, document, or list item

1. Open the list or library on which you want to edit permission levels.
2. Move the mouse pointer so that it hovers on the folder, document, or list item. Click the arrow that appears and select **Manage Permissions** from the drop-down list.



3. The permissions for that item will be displayed.
 - If checkboxes do not appear next to the user and group names on the **Permissions** page, permissions are being inherited from a parent securable object. If permissions are being inherited, you cannot remove users at this securable object. If you want to delete users and groups from the parent securable object (which this securable object inherits permissions from), you must manage the permissions of the parent.
4. Perform one of the following:
 - To manage the permissions of the parent, click on the **Actions** menu and select **Manage Permissions of Parent**.
 - If you are currently inherited permissions from the parent and want to break this inheritance and create unique permissions for this object, click on the **Actions** menu and select **Edit Permissions**. Click **OK** to confirm the action.
 - If the list or library is already using unique permissions that are not inherited, select the checkbox for the users and SharePoint groups that you want to remove from this list or library. On the **Actions** menu, click **Remove User Permissions**. Click **OK** to confirm the action.