

# Mediaprotect User manual



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## 1 Introduction

Mediaprotect helps you protect media in the same simple way as you protect documents. Once the package is installed and you protect certain media, the files will be password protected. Only authenticated members can open the files, otherwise members will be redirected to the login screen.

Mediaprotect is using the standard Umbraco MemberService or the ASP.NET Membership API, so you can use the existing login views for authentication. And you can plug in your own authentication mechanism.

Mediaprotect requires IIS7<sup>+</sup> and is compatible with Umbraco version 8<sup>1</sup> and up. Mediaprotect is compatible with SQL Server (Express) or SQL CE

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<sup>1</sup> Check the Umbraco archive page versions that support older versions of Umbraco

## 2 Installation

Install Mediaprotect via the Umbraco Package installer or via NuGet.

**Make sure that the installer has modify rights on the following folders:**

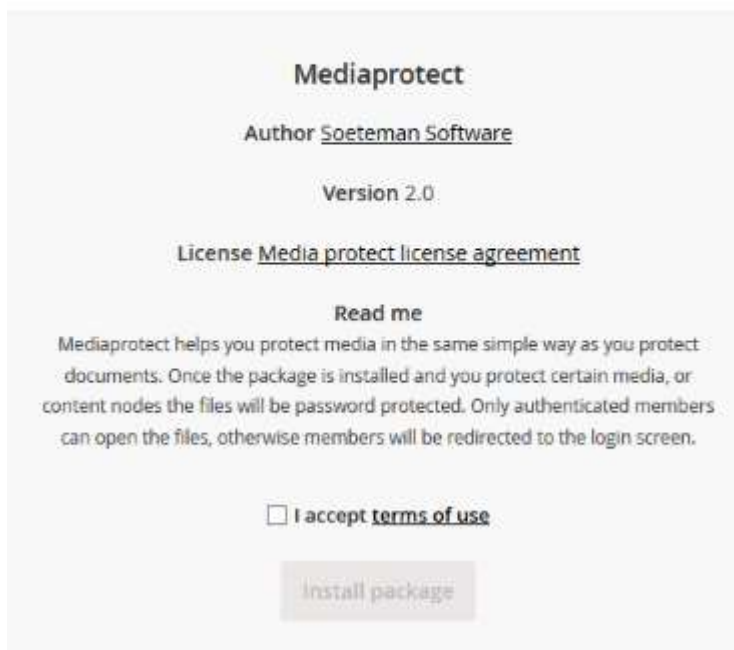
- /bin
- /App\_Data
- /App\_plugins

**The installer also needs rights to create tables in the database.**

If for some reason you can't give the installer these rights, you can install the package manually. Read the chapter manual configuration how to do this.

### 2.1 Package installer

Install the Mediaprotect package using the Umbraco package installer.



### 2.2 NuGet

Use the following command in the Package manager console.

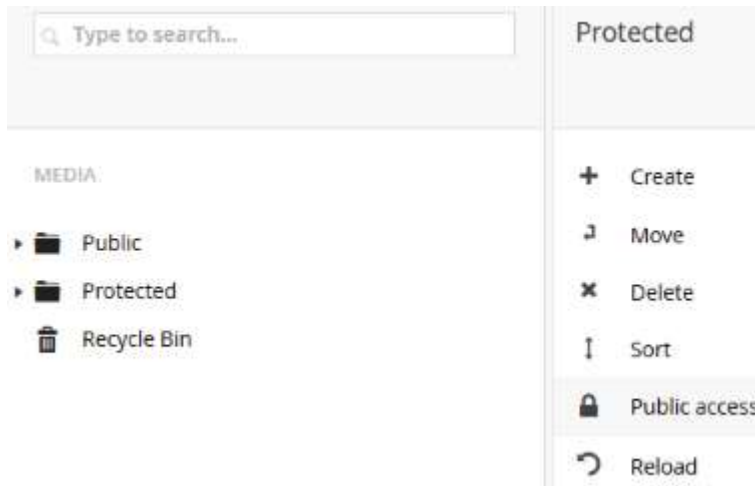
```
PM> Install-Package MediaProtect
```

## 3 Protect media

Once the package is installed you can protect your media items.

### 3.1 Protect media items

You can protect your media items by navigating to the media section, right click on the media folder you want to protect and select Public Access



This will open the same dialog you get when protecting content items.

### Mediaprotect 2.8

Choose how to restrict access to the media item **Products**

- Select the members who have access to the page Products**  
If you wish to grant access to specific members
- Group based protection**  
If you want to grant access to all members of specific member groups

Close **Next**



Single user protection will protected a media node based on an username and password, role based protection allows you to select one or more roles that have access to the media node.

### 3.1.1 Single User Protection

When you select single user protection you can specify the username and password. The user will be created with the credentials when you select update. You can also specify the login page where the website visitor will be redirected to when not logged in. And you can specify an error page where the member will be redirected to when the member is not authorized to access the requested file.

Mediaprotect 2.8

Select the members who have access to the page **Products**

 test2	Remove
 test3	Remove
Add	

Select the pages that contain login form and error messages

**Login Page**

Choose the page that contains the login form

 Login	Remove
---	--------

**Error Page**

Used when people are logged on, but do not have access

 No access	Remove
---	--------

Close Save

### 3.1.2 Role based protection

When you select role protection you can specify one or more roles that are allowed to access the media items. You can also specify the login page where the website visitor will be redirected to when not logged in. And you can specify an error page where the member will be redirected to when the member is not authorized to access the requested file.

Mediaprotect 2.8

Select the groups who have access to the page **People**

 Admin	Remove
 Employee	Remove
Add	

Select the pages that contain login form and error messages

**Login Page**

Choose the page that contains the login form

 Login	Remove
---	--------

**Error Page**

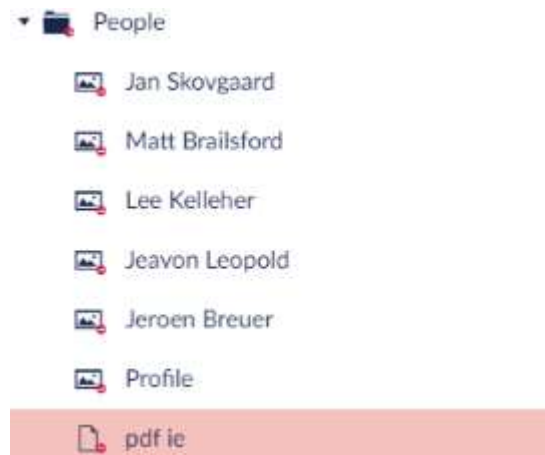
Used when people are logged on, but do not have access

 No access	Remove
---	--------

Close Save

### 3.1.3 Verify protection

You can recognize a protected media item in the tree or any supported media picker by the no entry sign.



When you open the media item and click on the link you should be redirected to the page you have specified as the login page. If you are already logged in as a website member you should be able to either open the protected media item or being redirected to the not authorized page.



## 4 Dashboards

### 4.1 Log protected files requests

During install a dashboard will be installed that enables logging in the media section.

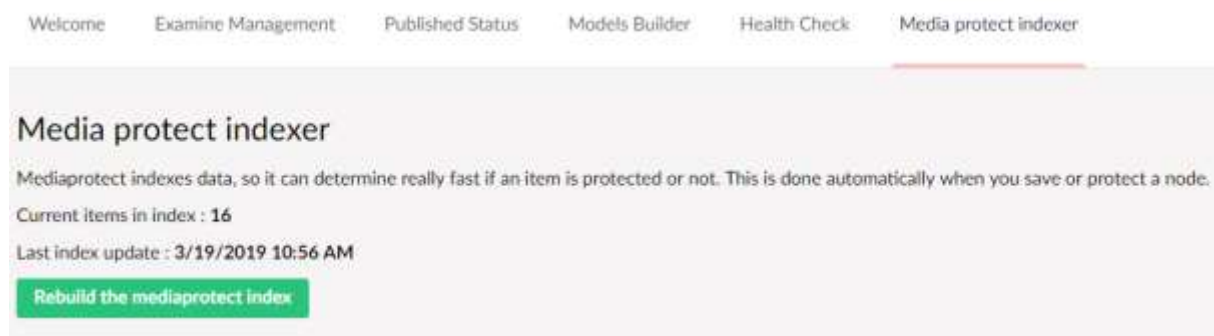
This Dashboard will give you information about which file got requested, the Media item, User info and when the file was requested. You can refresh the overview, export to csv or delete all records.



File	Media item	Username	User IP	Requested on
/media/werkfmhl/protecte...	pdf ie	richard@soetemansoftware.nl	127.0.0.1	3/19/2019 11:06:52 AM
/media/bxqjwfa2/profile.jpg	Profile	richard@soetemansoftware.nl	127.0.0.1	3/19/2019 10:56:23 AM

### 4.2 Index Dashboard

Media protect uses an index for fast query of media files. This index gets updated when you set protection or save a media item. In case you ever want to check the last index date, or want to completely rebuild the index you can use the Media Index Dashboard on the developer section.



Media protect indexes data, so it can determine really fast if an item is protected or not. This is done automatically when you save or protect a node.

Current items in index : **16**

Last index update : **3/19/2019 10:56 AM**

[Rebuild the mediaprotect index](#)

## 5 Library

Media protect comes with a small library that you can use in your Views and/or .net libraries to determine if certain items are protected , or who has access to those items.

### 5.1 Umbraco helper extensions

The most common used methods of the library are the ones that checks if an item is protected or if the user has access. You can access those methods using the standard Umbraco helper in your view.

#### 5.1.1 MedialsProtected

Use this extension method to check if a media item is protected based in the Id of the node

```
@Umbraco.MediaIsProtected(1068)
```

#### 5.1.2 MedialsProtected

Use this extension method to check if a media item is protected based in the filename

```
@Umbraco.MediaIsProtected("/media/eyey/test.pdf")
```

#### 5.1.3 MediaHasAccess

Use this extension method to check if the current logged in user has access to the media item, based on the id of the node.

```
@Umbraco.MediaHasAccess(1068)
```

#### 5.1.4 MediaHasAccess

Use this extension method to check if the current logged in user has access to the media item, based on the filename .

```
@Umbraco.MediaHasAccess("/media/eyey/test.pdf")
```

#### 5.1.5 AllowedGroups

Returns a list of groups that have access to the media item.

```
@Umbraco.AllowedGroups(1068)
```

#### 5.1.6 AllowedGroups

Returns a list of groups that have access to the media file.

```
@Umbraco.AllowedGroups("/media/eyey/test.pdf")
```

#### 5.1.7 AllowedMembers

Returns a list of usernames that have access to the media item.

```
@Umbraco.AllowedMembers(1068)
```

#### 5.1.8 AllowedMembers

Returns a list of usernames that have access to the media file.

```
@Umbraco.AllowedMembers("/media/eyey/test.pdf")
```

#### 5.1.9 IsProtectedByUserName

Returns true when the media is node is protected by username protection.

```
@Umbraco.IsProtectedByUsername(1068)
```

### 5.1.10 GetProtectedNodesForUser

Returns a list of nodes that are username protected and where the given user has access to.

```
@Umbraco.GetProtectedNodesForUser("testuser")
```

### 5.1.11 GetProtectedNodesForRole

Returns a list of nodes that are rolebased protected and where the given role has access to.

```
@Umbraco.GetProtectedNodesForRole("admin")
```

## 5.2 Protection API

It's also possible to use the API to modify protection info on nodes using the Protection class.

### 5.2.1 ProtectMedia

This method adds protection to a media node. Specify username protection or not, nodeId, the loginnode and no access node id.

```
MediaProtect.Library.Protection.ProtectMedia(false,1121,1095, 1095)
```

### 5.2.2 AddMembershipUserToMedia

This method adds a user to a protected node

```
MediaProtect.Library.Protection.AddMembershipUserToMedia(1121,"user")
```

### 5.2.3 AddMembershipRoleToMedia

This method adds a role to a protected node

```
MediaProtect.Library.Protection.AddMembershipRoleToMedia(1121,"role")
```

### 5.2.4 RemoveMembershipRoleFromMedia

This method removes a role from a protected media item

```
MediaProtect.Library.Protection.RemoveMembershipRoleFromMedia(1121,"role")
```

### 5.2.5 RemoveMembershipUserFromMedia

This method removes a user from a protected media item

```
MediaProtect.Library.Protection.RemoveMembershipUserFromMedia(1121,"user")
```

### 5.2.6 RemoveProtection

Removes protection from a media item.

```
MediaProtect.Library.Protection.RemoveProtection(1121)
```

## 5.3 Events

MediaProtect comes with a few events. Events are wired up exactly the same as Umbraco events are used. Create a class that derives from IComponent. In the initialize method wire up the events.

Events can be found in MediaProtect.extensions class

### 5.3.1 Requesting event

In the example below we redirect to the login page when filename ends with cancel.pdf.

### 5.3.2 Requested event

In sample below we log to the console window with requested mediaid, path and Boolean if the file is protected or not.

### 5.3.3 Dialog Events

To determine if an item got protected or unprotected from the UI. Media protect comes with two events

- MediaAccessEvents.MediaItemProtected. Will be triggered when a media item gets protected or a protected media item gets updated
- MediaAccessEvents.MediaItemProtectionRemoved . Will be triggered when protection is removed from a media item.

### 5.3.4 Sample

In the sample below you can see all events

```
public class EventTester : IComponent
{
    public void Initialize()
    {
        RequestEvents.FileRequesting += RequestEvents_FileRequesting;
        RequestEvents.FileRequested += RequestEvents_FileRequested;
        MediaAccessEvents.MediaItemProtected += MediaAccessEvents_MediaItemProtected;
        MediaAccessEvents.MediaItemProtectionRemoved +=
MediaAccessEvents_MediaItemProtectionRemoved;
    }
    public void Terminate(){}

    private void MediaAccessEvents_MediaItemProtectionRemoved(object sender,
MediaProtectionEventArgs e)
    {
        Debug.WriteLine($"Media Item protection removed {e.MediaId}, {e.Path}");
    }

    private void MediaAccessEvents_MediaItemProtected(object sender, MediaProtectionEventArgs e)
    {
        Debug.WriteLine($"Media Item protected {e.MediaId}, {e.Path}");
    }

    private void RequestEvents_FileRequested(object sender,
MediaProtect.Extensions.FileRequest.EventArgs.FileRequestedEventArgs e)
    {
        Debug.WriteLine($"File requested {e.MediaId}, {e.Path}, {e.Protected}");
    }

    private void RequestEvents_FileRequesting(object sender,
MediaProtect.Extensions.FileRequest.EventArgs.FileRequestingEventArgs e)
    {
        if (e.Path.ToLower().Contains("cancel.pdf"))
        {
            e.Cancel = true;
            e.RedirectPage = "/login/";
        }
    }
}
```

## 6 Configuration

### 6.1 IIS Configuration

We recommend the use of the integrated pipeline in that case you will be absolutely sure that every request will go through our media protect handler.

### 6.2 Media Protect configuration

You can change a few configuration settings in the Mediaprotect.config file which can be found in the folder /Umbraco/plugins/Mediaprotect/Config

#### 6.2.1 Enable/disable logging

To enable or disable logging set the enableLogging to true/false. It's also possible to log public files, set the logPublicMedia to true to enable logging of public files. Override the default export settings by modifying the csvDelimiter and csvStringIndicator attributes

```
<enableLogging logPublicMedia="false" csvDelimiter=";"  
csvStringIndicator="'"'"'">False</enableLogging>
```

#### 6.2.2 Disable public access dialog

By default the public access dialog on media is enabled, if you only use the API to modify members/roles you might want to disable the Dialog. Set the value of disableMediaProtectDialog element to true when you want to disable the public access dialog on media

```
<disableMediaProtectDialog>>false</disableMediaProtectDialog>
```

#### 6.2.3 Disable use of returnUrl querystring

By default the returnUrl is appended to the url, example  
?returnurl=%2fmedia%2f37%2fprotected\_file.pdf

If you want to disable this, set the disableReturnUrl config setting to true.

```
<disableReturnUrl>>false</disableReturnUrl>
```

#### 6.2.4 Default login and error node

When you specify default login and error pages these values will be used in the dialog when you protect the node so you don't have to specify them every time.

```
< defaultLoginNode>1048</ defaultLoginNode>  
< defaultErrorNode>1048</ defaultErrorNode>
```

#### 6.2.5 Enable asp.net membership provider

By default Mediaprotect uses the Memberservcie API to query member data. It's possible to switch this to the asp.net membership provider.

```
<authenticationProvider>MemberShipAuthentication</authenticationProvider>
```

In case you want to authenticate to something else. Get in touch with support [support@soetemansoftware.nl](mailto:support@soetemansoftware.nl) .

### 6.2.6 Disable the module without uninstalling

By default Mediaprotect is always on. When you want to disable the module set disabled to true in the config file

```
<disabled>true</disabled>
```

## 7 Azure Blob Storage

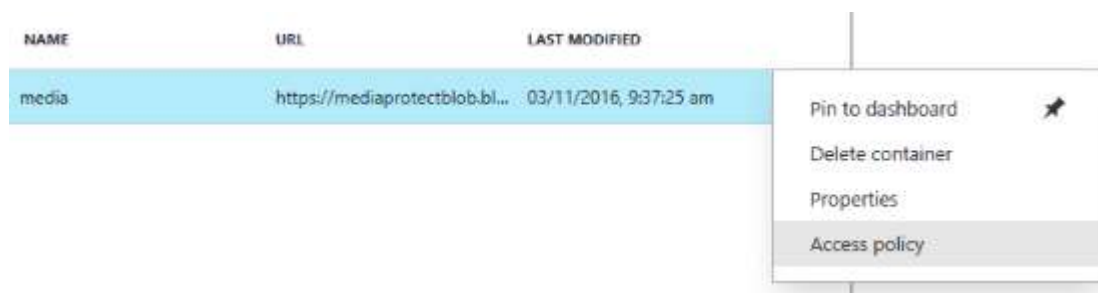
Media protect also works when Umbraco is using BLOB storage in combination with the UmbracoFileSystemProviders.Azure package which can be found at <https://our.umbraco.org/projects/collaboration/umbracofilesystemprovidersazure/>.

Media protect will protect the request from the website `/media/1001/protected.df` and will redirect to the login pages when the person is not logged in or doesn't have enough rights. The Azure Blob container is set to public by default<sup>2</sup> This means the protected file can still be downloaded via the Azure Url <https://test.blob.core.windows.net/media/1001/protected.pdf> . So besides setting protection on the Umbraco site we need to set the access level to private on the Azure container(s) as well.

### 7.1 Set protection level of Blob container to private

To make sure the file can't be viewed directly from the Azure Blob container, the Access policy needs to be set to private.

In the Azure portal select the Blob container and select Access policy



Then set Access level to private. Then try to open the url again and you will get an error message instead of the file.

```
<Error>
  <Code>ResourceNotFound</Code>
  <Message>
    The specified resource does not exist. RequestId:206e3516-0001-005f-7cca-35e7f9000000 Time:2016-11-03T12:01:38.0185776Z
  </Message>
</Error>
```

<sup>2</sup> This will change in the near future so the Azure provider allows you to set protection level to private by default



## 8 Manual Installation

If you renamed the Umbraco folder or for some reason can't give the installer sufficient rights to create tables in the database, or the sufficient rights to modify the following folders /bin, /app\_plugins you need to install Mediaprotect Manually.

### 8.1 Manual installation of files

- Open the folder in the zip file.
- Copy the **MediaProtect.\*.dll** files to the /bin folder of your Umbraco installation .
- Open the /app\_Plugins / folder.
- Create the folder **mediaProtect**.
- Open the folder mediaProtect and create the following folders:
  - o backoffice
  - o config
  - o css
  - o js
- Open the folder/app\_Plugins /mediaprotect/backoffice/ and create the following folders:
  - o dashboard
  - o dialogs
- Copy indexdashboard.html to /app\_Plugins /mediaprotect/backoffice/dashboard/
- Copy logviewer.html to /app\_Plugins /mediaprotect/backoffice/dashboard/
- Protect Protect.html to /app\_Plugins /mediaprotect/backoffice/dialogs/
- Copy mediaprotect.config to the folder **/app\_plugins /mediaprotect/config/**
- Copy mediaprotect.css to **/app\_plugins /mediaprotect /css/**
- Copy \*.js to **/app\_plugins /mediaprotect /js/**
- Copy mediaprotect.txt to the folder **/app\_plugins /mediaprotect /**
- Copy Package.manifest to the folder **/app\_plugins /mediaprotect /**

### 8.2 Additional web.config configuration

#### 8.2.1 Validate modules for all requests setting

To make sure the HttpModule gets called during each request set the attribute runAllManagedModulesForAllRequests to true.

```
<system.webServer>
  <validation validateIntegratedModeConfiguration="false" />
  <modules runAllManagedModulesForAllRequests="true">
    <remove name="ScriptModule" />
    <remove name="UrlRewriteModule" />
    <remove name="umbracoRequestModule" />
    <remove name="viewstateMoverModule" />
    <remove name="umbracoBaseRequestModule" />
  </modules>
</system.webServer>
```

### 8.3 Add the license file

When you bought a license for MediaProtect you can store the .lic file into the Bin folder of your Umbraco install and the trial message should disappear.

## 9 Troubleshooting

### 9.1 I don't see the MediaProtect package in my media section

Try logging out and an IIS reset to force rebuilding of the Umbraco tree

### 9.2 I get an Invalid License exception.

Make sure you've bought the correct license for the (sub)domain, or an enterprise license. Contact [support@soetemansoftware.nl](mailto:support@soetemansoftware.nl) for help.

### 9.3 When I browse to the file it's still visible on the website

Make sure Mediaprotect module is running by browsing to `/app_plugins/mediaprotect/mediaprotect.txt`. This should return true

### 9.4 How can I create a login box on my login page.

Umbraco comes with some partial templates for login and loginstatus. Use those.

### 9.5 I have another question

If you have any question please email us at [support@soetemansoftware.nl](mailto:support@soetemansoftware.nl) we love to help you.