

You can configure access to reporting features in the **Permissions** application. Choose the permission matrix for **Module -> Reporting** and assign the available [permissions](#) to the appropriate user roles.

Site: Corporate Site

Permissions for: Module Reporting

Report for user: (none)

☐ Show only this user's roles

Role	Read	Save reports	Modify	Destroy	Edit SQL Queries	Subscribe	Set connection string
Authenticated users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Basic users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Community administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Designers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Desk Administrators	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Editors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Readers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CMS Wireframe editors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Permission	Description
Read	Allows users to view existing reports.
Save reports	Allows users to save reports into the report archive.
Modify	Allows users to create, modify and delete reports. This also grants permission to subscribe to reports.
Destroy	Allows users to delete the version history of reporting objects.
Edit SQL queries	Allows editing of the queries used to retrieve data for reporting components (graphs, tables and values). This permission is needed to create new reports, but it can be a security risk, since it allows users to run queries against the website's database.
Subscribe	Allows users to subscribe to reports and their components. Subscription also needs to be allowed for individual reports through their properties. Unauthenticated (public) users cannot subscribe to reports.
Set connection string	Allows users to change the connection string property of reports and their components. The report uses the specified connection string to access the database when loading data.

Making reports available on the live site

1. Open the **Reporting** application.
2. Select the report in the tree and switch to the **General** tab.
3. Enable the **Allow public users to see this report** property.
4. Click **Save**.

The system now allows you to display the given report on the live site to non-authenticated (public) users. If the property is disabled, the report and all of its components (graphs, tables or values) are always hidden from public users

Specifying connection strings for reports

You can restrict the database-level permissions of the SQL queries used for reporting by registering custom connection strings and assigning them to reports.

1. Prepare a user account for your Kentico database with the required security configuration.
2. Edit your application's *web.config* file.
3. Add a new connection string into the `<configuration><connectionStrings>` section.
4. Enter authentication information (the *user id* and *password*) for the appropriate database user account.

```
<add name="CMSReadOnlyConnectionString" connectionString="Persist Security
Info=False;database=DBName;server=ServerName;user id=DBUser;password=password;
Current Language=English;Connection Timeout=240;" />
```

5. Open the **Settings** application.
6. Select the **Security & Membership** category.
7. Choose the **Default report connection string** (in the **Reporting** section).



Connection string names

The setting loads the list of connection strings from the web.config and displays their *name* attribute values. The *(default)* option represents the *CMSConnectionString* added by the application's initial database installation.

The system assigns the specified connection string to newly created reports. By default, all existing reports also inherit the connection string value from this setting.

Assigning a connection string to a specific report

1. Open the **Reporting** application.
2. Edit any reports for which you wish to set a non-default connection string.
3. On the **General** tab, uncheck the **Inherit** box below the **Connection string** property and select a different option. You can also override the connection string value for individual reporting components (graphs, tables and values).

The system now uses the assigned connection string when executing the queries of reports. This limits the functionality of the queries according to the database permissions of the user account specified in the connection string. Only users who have the **Set connection string** permission for the *Reporting* module are allowed to change the connection strings of individual reports.