

DRM-X 5.0 Custom Login Page Integration

NodeJS+Express Guide



Haihaisoft

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Overview

When a user opens a file encrypted with DRM-X 5.0 through the ZJGet browser, ZJGet will automatically pop up the user login window, as shown in the figure below:

With the DRM-X 5.0 custom login page integration, you can point this page to a custom login page on your website. That is, both the user login and course orders are validated through your website's database, without the need for DRM-X 5.0 platform validation. You only need to call the DRM-X 5.0 XML Web Service interfaces and use some interface methods to complete a series of business processes.

For example, after you have validated the user's login and course order, use [CheckUserExists](#) to check whether the user exists in the DRM-X 5.0 system. If not, call [AddNewUser](#) to add the user to DRM-X 5.0. Then, according to the user's courses or orders, call the [UpdateRightWithDisableVirtualMachine](#) method to update the rights and set up the license rights specific to this user, such as the validity period, watermark effect and watermark content, etc. Finally, call [getLicenseRemoteToTableWithVersionWithMac](#) method to request the DRM-X 5.0 license server to send the license. The whole process is very simple. After the website integration is configured, the user's own login page will pop up when the user opens your encrypted file.

Preparation Before Integration

1. DRM-X 5.0 Account:

The DRM-X 5.0 Advanced, Business and Enterprise accounts enable the XML Web Service interfaces for you, allowing seamless integration with your website and other platforms, such as online payment platforms.

Click the link below to view the DRM-X 5.0 account comparison:

<https://www.drm-x.com/products/drm-x-5.0/price>

2. User database, custom login page.

Your website should have its own database, which should contain data tables that store user information to record the users' order information. Then, you only need to add the corresponding integration code to the custom login page to complete the process. The whole process is very simple and fast. Let's get started.

DRM-X 5.0 Integration Return Parameters

When a user accesses your encrypted file with the ZJGet browser, the DRM-X 5.0 system will pass some information about the encrypted file to the integration page you have configured. You need to retrieve this information and use it when needed.

- **profileid**: The license template ID used by the currently encrypted file
- **clientinfo**: Basic client information
- **rightsid**: The license rights ID associated with the current license template. If a license template is associated with multiple license rights IDs, only one rights ID is returned here.
- **platform**: The operating system of the user's current device. Possible return values include Win7, Win10, Mac, Android, etc.

- **contenttype**: The type of the currently encrypted file
- **version**: The version number of the ZJGet browser
- **mac**: The MAC address of the current user's device
- **return_url**: The address of the currently encrypted file, used for the redirect after the license is obtained.
- **yourproductid**: The product ID or course ID in your website, which needs to be set manually in the license template.

Integration Interface Methods and Parameters

You can call the required interface methods according to your business needs. The following methods are commonly used for custom login page integration:

- [CheckUserExists](#) - Check whether the user exists
- [AddNewUser](#) - Add a new user
- [UpdateRightWithDisableVirtualMachine](#) - Update license rights
- [getLicenseRemoteToTableWithVersionWithMac](#) - Obtain license

For other interfaces, you can view the DRM-X 5.0 XML Web Service.

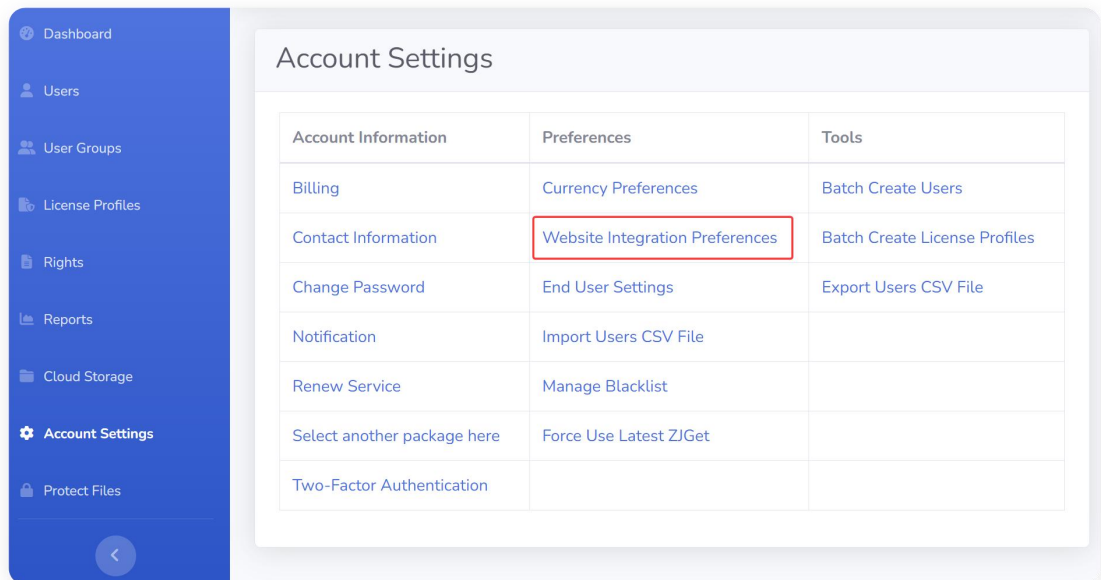
The following parameters are commonly used in the interface methods and are described as follows:

- **AdminEmail**: Your DRM-X 5.0 login account (Email)

- **WebServiceAuthStr:** The authentication code for calling the DRM-X 5.0 integration service. The value you set here must be the same as the value set on the DRM-X 5.0 platform.

Steps to set WebServiceAuthStr on the DRM-X 5.0 platform:

1. Log in to your [DRM-X 5.0 account](#);
1. On the left panel, click **Account Settings**, and select **Website Integration Preferences**, as shown below:



2. Select **Custom Login Page Integration**, enter the license service authentication code, as shown below:

Account Settings

Profile - Website Integration Preferences

Integration Method: [Integration Help](#)

☐ Synchronize user integration
☒ Custom login page integration

Synchronize user integration: Sync your website's user data to the DRM-X platform. The license acquisition method and login page will continue to use the default DRM-X 5.0 login interface.

Custom login page integration: When users obtain a license, they will be redirected to your custom page for verification. You can call DRM-X 5.0 service APIs to implement your business logic and deliver licenses to users. This method requires access to your website source code and database support.

Please set a Web Service Authentication String for DRM-X web service (DRM-X need you provide this string to access DRM-X web service.)

Please enter License URL(Must begin with http:// or https://) (License URL is the url used by pop window when acquiring license)

Finally, click the **Submit** button to save the settings.

- **GroupID:** is the user group ID you created on the DRM-X 5.0 platform. You can find the user group ID in the DRM-X 5.0 user group list.

User Groups	
Group ID	Group Name
18743	测试用户组
18702	Basic Group(A sample group)

Note: In the integration code, you only need to use one fixed user group ID. Users who obtain licenses through the integration will be added directly to that user group. If you want to change the user group that a user belongs to, you can modify it manually on the DRM-X 5.0 platform. In general, you only need one user group after integration.

- **UserLoginName:** The login account of the end user.

Sample Code Download

You can download the standard integration sample code from the link below:

http://www.drm-x.com/download/DRM-X_5.0_Integration_EN/DRM-X5.0_Nodejs_Express_Integration_Code.zip

Custom Login Page Integration Steps

Process description:

1. When a user accesses the encrypted content, after the ZJGet browser detects the account integration, it will POST the parameters mentioned above, such as profileid and clientinfo, to the /index address.

2. Submit the login form to </index/login> to perform some business validation, such as verifying the username and password and verifying whether the user has purchased this course, etc. After you have finished validating the user's login and course order, redirect to </licstore5>.
3. In </licstore5>, you need to call some DRM-X 5.0 interfaces. For example, call [CheckUserExists](#) to check whether the user exists in the DRM-X 5.0 backend. If not, call [AddNewUser](#) to add the user to the DRM-X 5.0 backend. Then call [UpdateRightWithDisableVirtualMachine](#) to update the license rights that the user is about to obtain, such as setting the validity period of the user's current encrypted video and the watermark display content, etc. After completing the above process, call [getLicenseRemoteToTableWithVersionWithMac](#) method to obtain the license.

(Note: The above process is described according to the sample code and is for reference only. You can also set up a different process according to your own needs, but the method of obtaining the license is the same.)

This sample code uses the Express framework for integration. The

Express middleware referenced in the integration code includes body-parser and express-session, and the template engine is express-handlebars. You can also use other template engines. In addition, the soap module is used to call the DRM-X 5.0 XML Web Service interfaces.

Therefore, in our sample code, the dependencies we install are as follows:

```
npm install express express-handlebars body-parser express-session soap
```

Step 1: index Route Receives the Required Parameters

[/index](#) route is the first access address configured for the website integration. Here, you need to receive the integration parameters returned by the ZJGet browser and store these parameters using cookies or sessions. The parameters that can be received include profileid, clientinfo, rightsid, yourproductid, platform, contenttype, version, return_url, and mac. For what these parameters specifically represent, please refer to the parameter introduction section above.

The sample code is shown below:

```
const drmx_params = {  
  "clientinfo" : req.body.clientinfo,    // Client information  
  "profileid"  : req.body.profileid,     // License template ID
```

```
"rightsId" : req.body.rightsid, // Rights ID

"yourproductid" : req.body.yourproductid, // Product ID or course ID

"platform" : req.body.platform, // Platform

"contenttype" : req.body.contenttype, // Content type

"version" : req.body.version, // ZJGet browser version

"return_url" : req.body.return_url, // Return URL after getting the license, must
be set in the title tag of the licstore5 page

"mac" : req.body.mac, // Current device MAC address

}
```

If the user has already logged in to your website, the user does not need to log in again. You can retrieve the user's login information in [/index](#) and verify whether the user has purchased the course. Then, according to the validation result, redirect to the [/login](#) route, or prompt the user that they have not purchased the course, etc.

If the user has not logged in to the website, the user login page will be displayed. The login form POSTs to the [/index/login](#) route to validate the user's login and order. After the validation passes, redirect to the [/login](#) route.

Step 2: Add Business Logic to /login and /index/login

According to your needs, you can add code to this page to validate

the user's login information and to verify whether the user has permission to open this encrypted file. Please add the business code according to your needs. Then redirect to [/licstore5](#) to call the DRM-X 5.0 XML Web interfaces.

Step 3: Call the XML Service Interfaces in licstore5

In [/licstore5](#), you need to call several commonly used interface methods, including:

- [CheckUserExists](#)
- [AddNewUser](#)
- [UpdateRightWithDisableVirtualMachine](#)
- [getLicenseRemoteToTableWithVersionWithMac](#)

For the specific calling of the interface methods and the introduction of the parameters, please refer to the sample code and the code comments.

Note: The name of the page that obtains and stores the license must be licstore5.

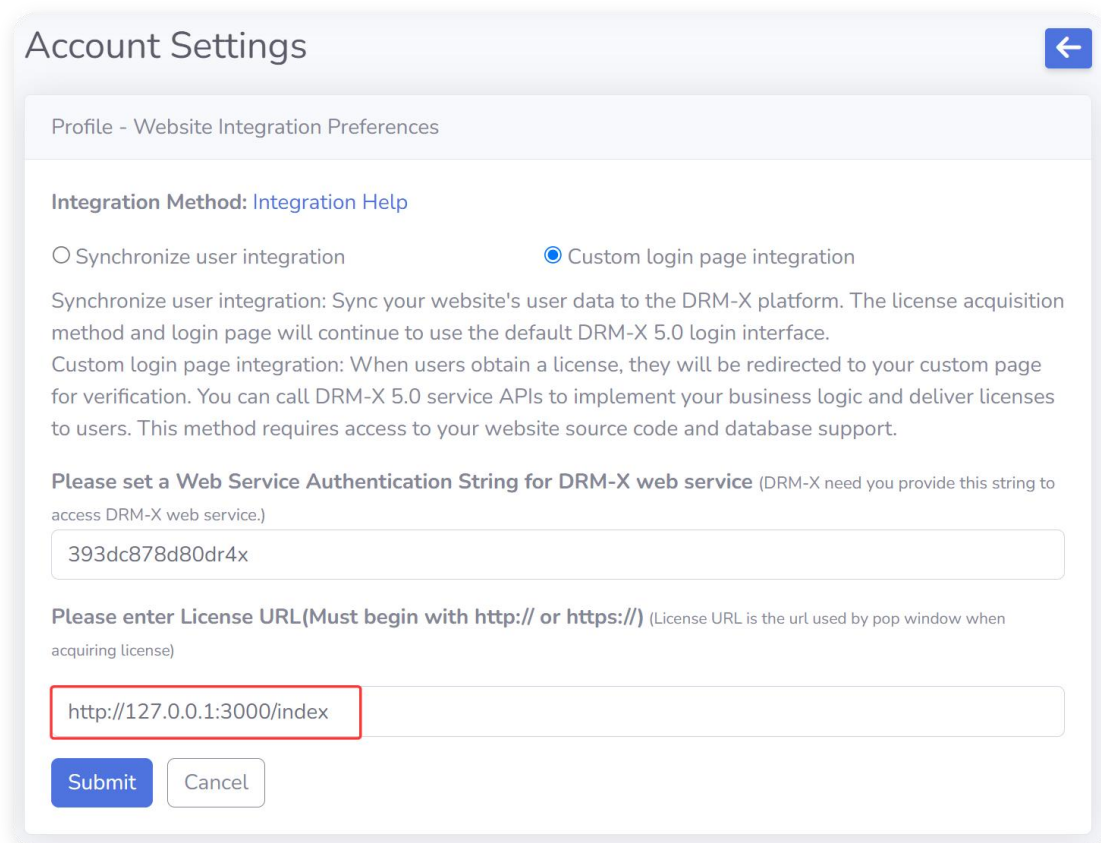
Step 4: Integration Parameter Settings

Configuration steps:

1. Log in to your [DRM-X 5.0 account](#);
2. On the left panel, click “ **Account Settings** ” , and select

“Website Integration Preferences”

3. Select **Custom Login Page Integration**, and enter the URL address of your custom page, as shown in the figure below:



Account Settings

Profile - Website Integration Preferences

Integration Method: [Integration Help](#)

☐ Synchronize user integration ☒ Custom login page integration

Synchronize user integration: Sync your website's user data to the DRM-X platform. The license acquisition method and login page will continue to use the default DRM-X 5.0 login interface.

Custom login page integration: When users obtain a license, they will be redirected to your custom page for verification. You can call DRM-X 5.0 service APIs to implement your business logic and deliver licenses to users. This method requires access to your website source code and database support.

Please set a **Web Service Authentication String** for DRM-X web service (DRM-X need you provide this string to access DRM-X web service.)

393dc878d80dr4x

Please enter **License URL**(Must begin with **http://** or **https://**) (License URL is the url used by pop window when acquiring license)

http://127.0.0.1:3000/index

Submit Cancel

4. Click the **Submit** button below to save the integration settings. After the setup is complete, the page pointed to by this URL will pop up when users open your encrypted file.

Step 5: Process the Information Returned by the License Acquisition Method

When calling the `getLicenseRemoteToTableWithVersionWithMac` method to obtain a license, some error information may be

returned. This information needs to be retrieved in the integration code and handled accordingly, such as: hardware binding limit exceeded, license template does not exist, user group does not exist or the user has no permission to access this user group, license rights do not exist, license rights have expired, etc...

The return value is usually divided into the method's return value and the Message parameter value. Here, we use License to represent the method's return value and Message to represent the Message parameter value for illustration.

1. The content provider's account has insufficient balance

License returns "ERROR:ADMIN_NO_MONEY"

2. Rights expired; the expiration date is earlier than the current date

Message = "ERROR:RIGHTS EXPIRED"

License returns "No License"

Hardware binding limit exceeded

License returns "ERROR:EXCEED_BIND"

3. Common Message return information

Message = "Webmaster doesn't have the User Group or you don't have permission to access this User Group. Please contact your webmaster for details."

The content provider does not have this user group, or the current user has no permission to access this user group.

Message = "Webmaster doesn't have this Rights or you don't have permission to acquire this rights. Please contact your webmaster for details."

The content provider does not have this license rights, or the current user has no permission to access this license rights.

Message = "Webmaster hasn't encrypt this file or you don't have permission to acquire license. Please contact your webmaster for details."

The content provider has not encrypted this file (the license template does not exist), or the current user has no permission to obtain this license template.

For all the above Message information, the License return value is empty.

4. Integration login error

Message returns " "

License returns "Your XML web service login info is not correct. Please check your AdminEmail and WebServiceAuthStr settings."

The integration parameters AdminEmail and WebServiceAuthStr are configured incorrectly.

Finally, you can also check whether the License contains license_div_drm-x5 to determine whether the license was obtained correctly. For example:

```
if(strpos($license,'license_div_drm-x5') === false )
```

4. Then redirect to [/licerror](#), the corresponding error display page,

to output the License and Message.

Step 6: Open Files Encrypted with DRM-X 5.0

When you open your encrypted file with ZJGet, the browser will automatically redirect to the integration page you have configured. After the validation passes and the license is obtained, congratulations! You have successfully completed the integration!

Haihaisoft Professional Technical Support

**If you still have any questions about the integration,
please feel free to contact us!**

<https://www.haihaisoft.com/Contact.aspx>



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