

# **Haihaisoft DRM-X 4.0 Customize Login Page Integration NodeJS+Express Guide**



**Haihaisoft Limited**

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## Overview

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After custom login page integration, your users just need to register and login on your own website. It will open your website's DRM login window when the user opens your protected content.

For the integration, you need to create a new custom login page or modify your existed login page. It requires some code work. But don't worry, it's very simple.

All that you need to do is to call the **getLicenseRemoteToTableWithVersion** function. You can get the details about DRM-X 4.0 XML Web Service interface by the link below:

<http://4.drm-x.com/haihaisoftLicenseservice.asmx>

## What necessary before integration?

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### 1. DRM-X 4.0 Account

You need to have a DRM-X 4.0 Premier, Business or Enterprise account before you can integrate with your platform. DRM-X 4.0 personal account users can manage its users on [4.drm-x.com](http://4.drm-x.com) instead.

Click the link below to see the DRM-X Account Comparison.

<http://www.drm-x.com/Fees-Compare-4.0.aspx>

### 2. User database, custom login page.

You should setup a database that can store your users' information if you want to integrate with DRM-X 4.0 platform. You also need to

create user custom login page for your users to login.

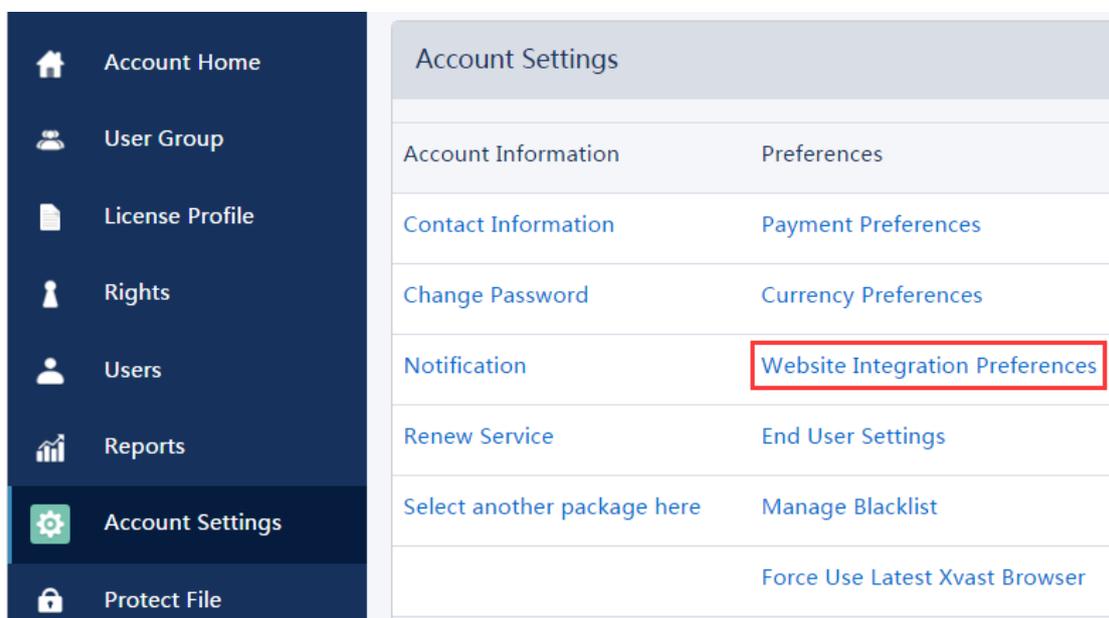
## Parameter Introduction

The parameter in **blue color** is required field. You can set the others into 'N/A' (means empty) or enter the correct value.

- **AdminEmail**: your login Email of DRM-X 4.0 Account.
- **WebServiceAuthStr**: the Web Service Authenticate String for DRM-X 4.0 web service. The value you set here must be the same with the one on your DRM-X 4.0 account.

### Steps to setup:

1. Login your DRM-X 4.0 account.
2. Click the **Account Settings** in the left panel and choose the **Website Integration Preferences**, as shown in the screenshot below:



3. Select **Custom login page integration** and enter the **Web Service Authenticate String**. As shown in the screenshot

below:

Profile - Website Integration Preferences

**Integration Method:** [Integration Help](#)

Synchronize user integration
  Custom login page integration

Note: Synchronize user integration is synchronize your website users to DRM-X.com your user. We protect the password with strong encryption. It's secure and easy. (Recommend for most users)  
 Custom login page integration is when user acquiring license, it will pop up your website DRM login window to acquire license. It requires you create a new DRM login page. It requires more code work. (Not Recommend, only for advanced users)

**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.)

123qwe

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

Submit
Cancel

4. Click the **Submit** button below and you will get the message shown on the picture below:

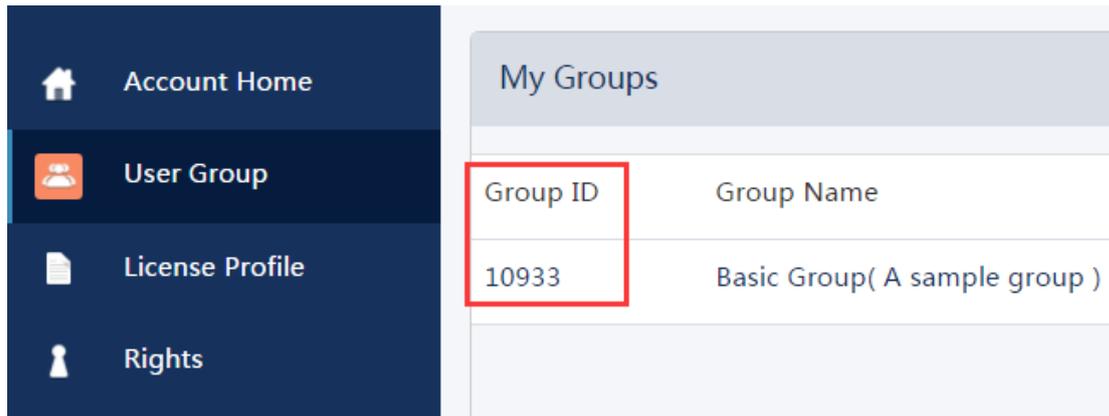
You have updated Website Integration Preferences successfully.

Profile - Website Integration Preferences

**Integration Method:** [Integration Help](#)

Synchronize user integration
  Custom login page integration

- **GroupID:** the ID of your Group created in your DRM-X 4.0 account. You can find GroupID value in Users Group of DRM-X 4.0 Account.



| My Groups |                               |
|-----------|-------------------------------|
| Group ID  | Group Name                    |
| 10933     | Basic Group( A sample group ) |

Note: in the code you just need to enter one Group ID, and the users signed up on your website will be added into group directly. You can manually change the group they belong to in your DRM-X 4.0 account if you want.

- **UserLoginName**: the username or unique UserID in your user database.
- **UserFullName**: the Full Name of User. This parameter is option. You can leave this UserFullName parameter to blank, or just set it value to N/A.
- **ProfileID**: the ID of the license profile you create on DRM-X 4.0. DRM-X 4.0 provides this parameter.
- **ClientInfo**: the basic client information of your users. DRM-X 4.0 provides this parameter.
- **RightsID**: the ID of rights that you created in your DRM-X 4.0 Accounts. DRM-X 4.0 provides this parameter.
- **IP**: IP address of your user which acquire license. You must return user's correct IP address.
- **Platform**: the operating system of end user. DRM-X will return value: Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Mac or Android, and so on.
- **ContentType**: the type of protected content, DRM-X 4.0 will return Audio/Video or PDF.

- **Version:** Xvast browser version, DRM-X 4.0 provides this parameter.
- **yourproductid:** the ProductID in your system, please set it in License Profile.

## Download Sample Code

You can download the sample pages by clicking the link below:

Standard integration code:

[http://www.drm-x.com/download/DRM-X\\_4.0\\_Integration/DRM-X4.0\\_Nodejs\\_Express\\_Integration\\_Code.zip](http://www.drm-x.com/download/DRM-X_4.0_Integration/DRM-X4.0_Nodejs_Express_Integration_Code.zip)

## Step by Step Introduction

### Process introduction:

1. The user first accesses the [/index](#) route and obtains the necessary parameters from the DRM-X 4.0 server. If the user has logged in to the website, the second login step ([/index/login](#)) can be omitted, and the user's login information can be directly obtained and verify the user's order.
2. The [/index/login](#) route performs some business verification, such as verifying the user name and password, and verifying whether the user has purchased this course.
3. After the verification is passed, direct to the [/login](#) route to call the DRM-X 4.0 interface method, such as checking whether the user exists (CheckUserExists), adding users (AddNewUser), updating Rights (UpdateRightWithDisableVirtualMachine), etc.
4. Then direct to [licstore.php](#) route to obtain license.

(Note: The above process is described in accordance with the sample code and is for reference only. You can create different processes according to your own needs, but the method of calling the interface is the same.)

**Tips:** The integrated URL cannot be accessed directly. You need to use the Xvast browser to open the encrypted file, and the browser will be directed to the integrated page you set. Please read the fifth step for setting.

## **Step 1. Reference NodeJS modules and Express middleware**

This sample code uses the Express framework for integration. The Express middleware referenced in the integrated code includes "body-parser" and "express-session".

The template engine is "express-handlebars", you can also use other template engines.

And the soap module of NodeJS, we use the soap module to call the XML Web Service interface of DRM-X 4.0.

## **Step 2. index route to receive integration parameters**

**Index** routing is the URL in the website integration settings. Here you need to receive some integration parameters returned from the Xvast browser, and use cookies or session to store these parameters.

The received parameters include profileid, clientinfo, rightsid, yourproductid, platform, contenttype, version, and return\_url.

The sample code is as follows:

```
const drmx_params = {
  "clientinfo" : req.body.clientinfo,
  "profileid" : req.body.profileid,
  "rightsid" : req.body.rightsid,
  "yourproductid" : req.body.yourproductid,
```

```
"platform"      : req.body.platform,
"contenttype"   : req.body.contenttype,
"version"       : req.body.version,
"return_url"    : req.body.return_url,    // The URL of the current
encrypted file, the URL to be redirected after obtaining the license, must be
set to this value in the <title> tag of the licstore page
}
```

If the user has logged in to your website, the user does not need to login again, you can get the user's login information in the [/index](#), and verify whether the user has purchased the course, and then be directed to the login route according to the verification result, or prompt the user has not purchased Courses and other information.

If the user is not logged in to the website, the user login page will be displayed, and the login form is POST to the [index/login](#) route to verify the user login and user order. After the verification is passed, the URL will be directed to the [/login](#) route.

### **Step 3. Call the interface in the login route**

After the user passes the login verification and business logic verification, you need to call some interfaces provided by DRM-X 4.0 in the [/login](#) route.

For the detailed calling process of these methods, please refer to the sample code we provide. We have listed the parameters required for calling the interface in the code.

1. **CheckUserExists**: Check whether the user exists.
2. **AddNewUser**: If the user does not exist, call the AddNewUser method.
3. **UpdateRightWithDisableVirtualMachine**: Update the Rights settings for which the user will obtain a license. For example, the

validity period of the license (ExpirationAfterFirstUse), or the user's information is displayed on the encrypted file through the watermark (WatermarkText).

After the interface method is executed, visit the obtain license and license storage page.

#### **Step 4. Obtain and store the license in licstore**

Call the [getLicenseRemoteToTableWithVersion](#) method in the [licstore.php](#) route to request the DRM-X 4.0 server to send the license.

**Note:** The route to store the license must start with licstore, which can be licstore.php, licstore.asp or licstore.jsp. Only these route names can be recognized by Xvast.

For detailed license code, please refer to the sample code we provide.

After calling the interface method for obtaining a license, if there is no program error, you will get a license or license error message. If the license has an error message, you can use the following code to judge:

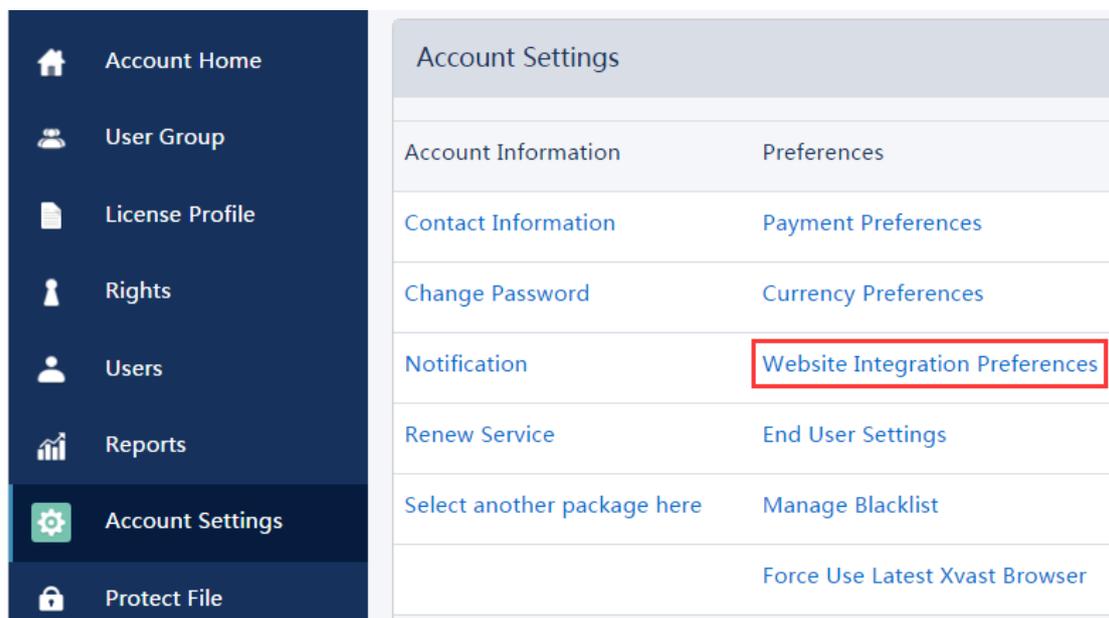
```
if(license.indexOf('<div id="License_table_DRM-x4" style="display:none;">') == -1){  
    // The error message will be displayed on the licerror page  
    req.session.license = license;  
    req.session.message = message;  
    res.redirect('licerror');  
}
```

For details about what the license error messages include, please refer to [Step 6](#).

## **Step 5. Set DRM-X 4.0 Website Integration Parameters.**

### **Steps to setup:**

1. Login your [DRM-X 4.0 account](#).
2. Click the **Account Settings** in the left panel and choose the **Website Integration Preferences**, as shown in the screenshot below:



3. Select **Custom login page integration** and enter the URL of your customized page. As shown in the screenshot below:

Profile - Website Integration Preferences

**Integration Method:** [Integration Help](#)

Synchronize user integration       Custom login page integration

Note: Synchronize user integration is synchronize your website users to DRM-X.com your user. We protect the password with strong encryption. It's secure and easy. (Recommend for most users)  
Custom login page integration is when user acquiring license, it will pop up your website DRM login window to acquire license. It requires you create a new DRM login page. It requires more code work. (Not Recommend, only for advanced users)

**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.)

123qwe

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

http://localhost:3000/index

4. Click the **Submit** button below and you will get the message shown on the picture below:

You have updated Website Integration Preferences successfully.

Profile - Website Integration Preferences

**Integration Method:** [Integration Help](#)

Synchronize user integration       Custom login page integration

## **Step 6: Integration Error Messages**

When you integrate DRM-X 4.0 with your website, it may return some error messages. You should write code check the returned error messages and displays the error messages properly to end users. It

will help you and your users identify the error easily. For example: Exceed Bind Number, License Profile doesn't exists, User Group doesn't exists, License Rights doesn't exists and Rights Expired.

1. Content Provider has insufficient funds in DRM-X 4.0 platform.  
Message = "Your remain fund is not enough to pay monthly fee. Please add fund to your DRM-X account. For more information, please visit: <http://www.drm-x.com>"  
License Return "ERROR:ADMIN\_NO\_MONEY"
2. The Rights have expired, the expiration date is less than the current date.  
Message = "ERROR:RIGHTS EXPIRED"  
License Return "No License"
3. Exceeded hardware combined number  
Message = "Sorry, you can only acquire license in " & AllowBindNum & " computers. Please contact your content owner for details."  
License Return "ERROR:EXCEED\_BIND"
4. Common Returned Message  
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."  
Content provider doesn't have this user group, or you don't have permission to access to 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."  
Content owner doesn't have this License Rights, or you don't have permission to acquire this Rights.  
  
Message = "Webmaster hasn't encrypt this file or you don't have permission to acquire license. Please contact your webmaster for details."  
Content owner hasn't encrypted this file (The License Profile does not exist ), or you don't have permission to acquire this License Profile.
5. Website Integration Preferences error.  
License Return "Your XML web service login info is not correct. Please check your AdminEmail and WebServiceAuthStr settings."

## **Step 7. Open your contents protected by DRM-X 4.0.**

Congratulations! The integration has been done. When the users open your encrypted content, it will open the custom login page.

## **Expert support from Haihaisoft**

If you still have problems with the integration,

Please feel free to contact us:

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



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