

How to Deploy LMS (Learning Management System) Application Application in Enterprise Server?

For Windows 10 or 11 follow step 1.

Step 1. Download and install docker-desktop for Windows from <https://www.docker.com/products/docker-desktop>

During installation, make sure Enable Hyper-V feature is selected and click on OK to complete the installation process and restart your computer.

For Windows Server 2019 follow the instructions given in the link <https://www.virtualizationhowto.com/2020/12/install-docker-in-windows-server-2019/>
For Windows 10 or 11, follow step 1.

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For Windows Server 2019 follow the instructions given in the link <https://www.virtualizationhowto.com/2020/12/install-docker-in-windows-server-2019/>

For Windows Server 2022 follow the instructions given in the link <https://www.virtualizationhowto.com/2022/09/install-docker-on-windows-server-2022/>

How to Install docker using power shell in Windows Server 2019 /2022?

Run the following commands in PowerShell to install docker in Windows Server 2019 /2022

Step 1.1:

```
Install-WindowsFeature -Name 'Containers'
```

Step 1.2:

```
Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V -All -NoRestart  
Install-WindowsFeature RSAT-Hyper-V-Tools -IncludeAllSubFeature
```

Step 1.3:

```
Restart-Computer -force
```

Step 1.4:

```
Install-Module -Name DockerMsftProvider -Repository PSGallery -Force  
Select "Yes", if you see any popup.
```

Step 1.5:

```
Install-Package -Name docker -ProviderName DockerMsftProvider  
Select "Yes to All", if you see any popup.
```

Step 1.6: Restart-Computer -force

NOTE : Step 2 needs to be executed only in Windows 10 and 11

Step 2: After successful installation, go to Docker properties and click “Switch to Windows containers”.

Step 3: Setup the running environment for containerized applications.

NOTE: Make sure you have logged in to your Docker account before executing the following commands.

3.1 Download Docker images from Docker Hub by running the following commands in Windows power shell.

```
Docker pull relgonetworks/academics2022:latest
```

```
Docker pull relgonetworks/roc2022:latest
```

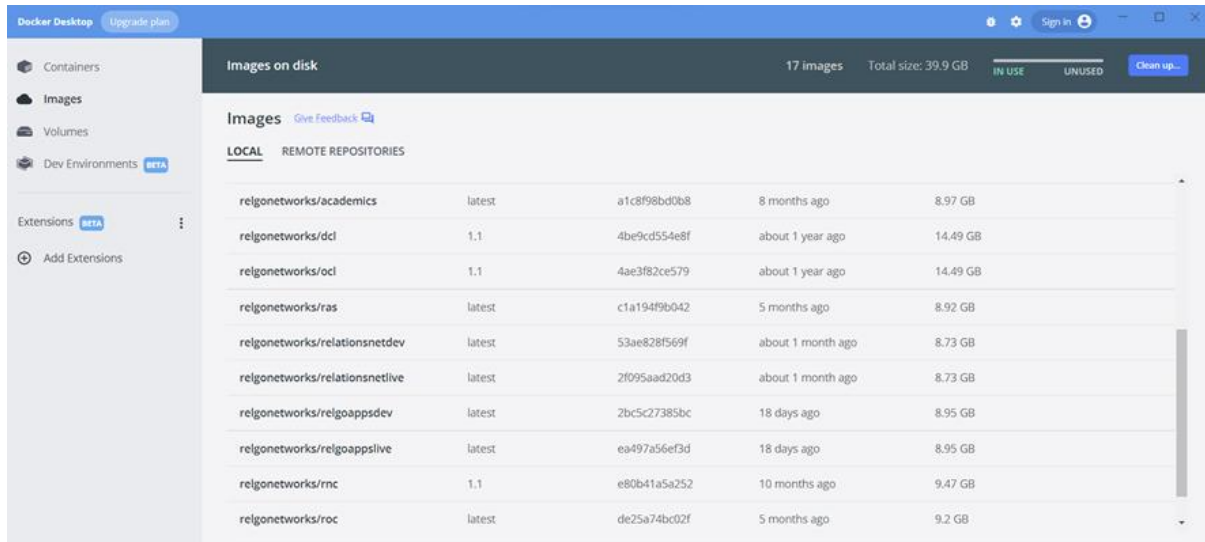
```
Docker pull relgonetworks/relgoappslive2022:latest
```

```
Docker pull relgonetworks/relationsnetlive2022:latest
```

```
Docker pull relgonetworks/ocl2022:latest
```

Administrator: Windows PowerShell

```
PS C:\> docker pull relgonetworks/roc:latest
latest: Pulling from relgonetworks/roc
4612f6d0b889: Already exists
c67ded6868b6: Already exists
acfd20817b94: Already exists
19b521ca6db2: Already exists
4784b611501d: Already exists
43dad267b59c: Already exists
9c87cbd198cc: Already exists
dd7883b11a55: Already exists
5f1c01609b3b: Already exists
578095460f76: Already exists
61401d5a3fd7: Already exists
7fea73f74001: Extracting [=====] 279.7MB/279.7MB
dd41101d8279: Download complete
db2b9dd69fe4: Download complete
15c2098af6f7: Download complete
5c7ef6aed335: Download complete
```



3.2

Create a new folder called “temp” in C drive.

Download OCLDB.mdf zip file from the following URL. Extract OCLDB.mdf from the downloaded zip file and copy it to the temp folder in the C drive

[https://relgo.com/Resources/@Bizcenter\\$5f19b2f2-8245-4f97-98ac-04c8ab231415-OCLDB_1.0.zip](https://relgo.com/Resources/@Bizcenter$5f19b2f2-8245-4f97-98ac-04c8ab231415-OCLDB_1.0.zip)

Download OCLDB_log.ldf zip file from the following URL. Extract OCLDB_log.ldf from downloaded zip file and copy it to the temp folder in the C drive

[https://relgo.com/Resources/@Bizcenter\\$7ae9ea5f-353d-4bde-b006-6bf2bf94dbda-OCLDB_log_1.0.zip](https://relgo.com/Resources/@Bizcenter$7ae9ea5f-353d-4bde-b006-6bf2bf94dbda-OCLDB_log_1.0.zip)

Open Windows PowerShell and run the following commands one by one.

3.3 `docker network create --driver=nat --subnet=172.28.0.0/24 --gateway=172.28.0.1 relgonet`

3.4 `docker run -d --name "OCL" --net=relgonet --ip=172.28.0.21 -p 1433:1433 -v C:/temp/:C:/temp/ -e MSSQL_SA_PASSWORD=Relgo123** -e ACCEPT_EULA=Y -e attach_dbs="{['dbName':'OCL','dbFiles':['C:\\temp\\ocldb.mdf','C:\\temp\\ocldb_log.ldf']}]}" relgonetworks/ocl2022:latest`

3.5 `docker run -d --name "RelationsNetLive" -m 2GB --cpus="1" --net=relgonet --ip=172.28.0.16 -p 9016:80 relgonetworks/relationsnetlive2022:latest`

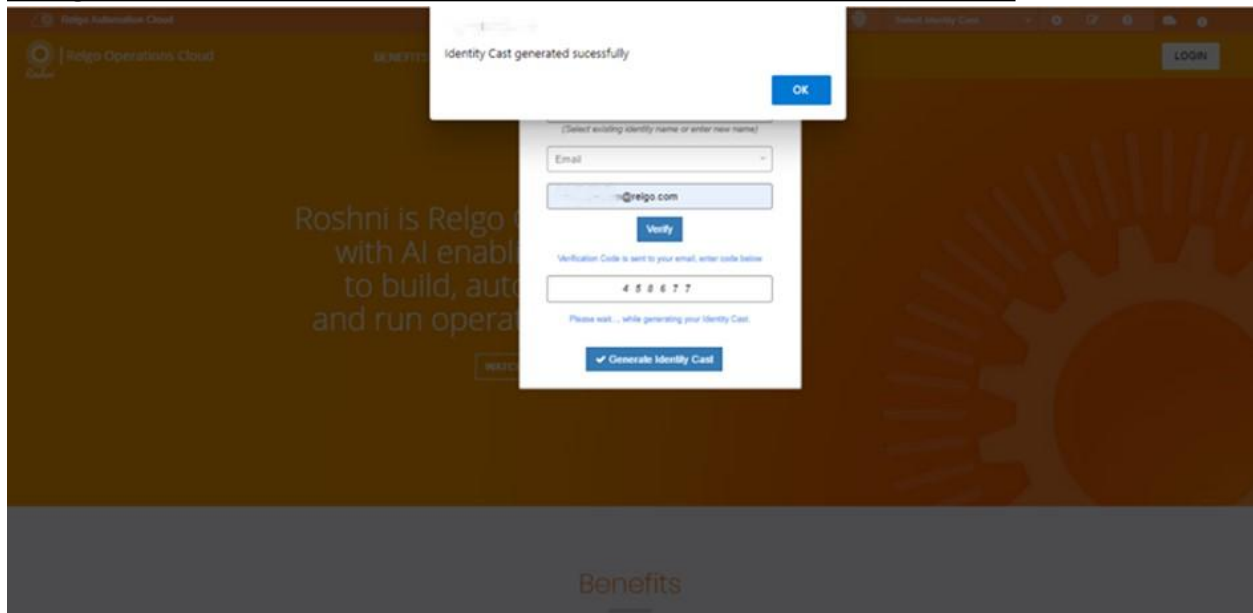
3.6 docker run -d --name "SolutionPortal" -m 4GB --cpus="1" --net=relgonet --ip=172.28.0.13 -p 9013:80 relgonetworks/roc2022:latest

3.7 docker run -d --name "RelgoAppsLive" -m 8GB --cpus="2" --net=relgonet --ip=172.28.0.14 -p 9014:80 relgonetworks/relgoapps2022:latest

3.8 docker run -d --name "Academics" -m 4GB cpus="2" --net=relgonet --ip=172.28.0.18 -p 9020:80 relgonetworks/academics2022:latest

After successful execution of above commands now you can access Relgo Solution Portal website from your browser by typing <http://172.28.0.13>

****Note :** Now, you can create a token by validating your email address and select token to login to Your Solution Portal website and complete basic installations.



NOTE: FOLLOW STEP 4 INSTRUCTIONS, IF YOU DO NOT HAVE PUBLIC ACCESS TO RelationsNet URL

STEP 4: NOTE: TO DEPLOY THE APPLICATION PACKAGE FROM RELGO CLOUD, WE NEED TO ENABLE "RELATIONS NET URL" PUBLIC ACCESSIBLE.

How to make your IP publicly accessible?

Here I will use the port forwarding technique to make your IP publicly accessible.

Step 4.1: Login to <http://portmap.io> or register yourself if you do not have an account.

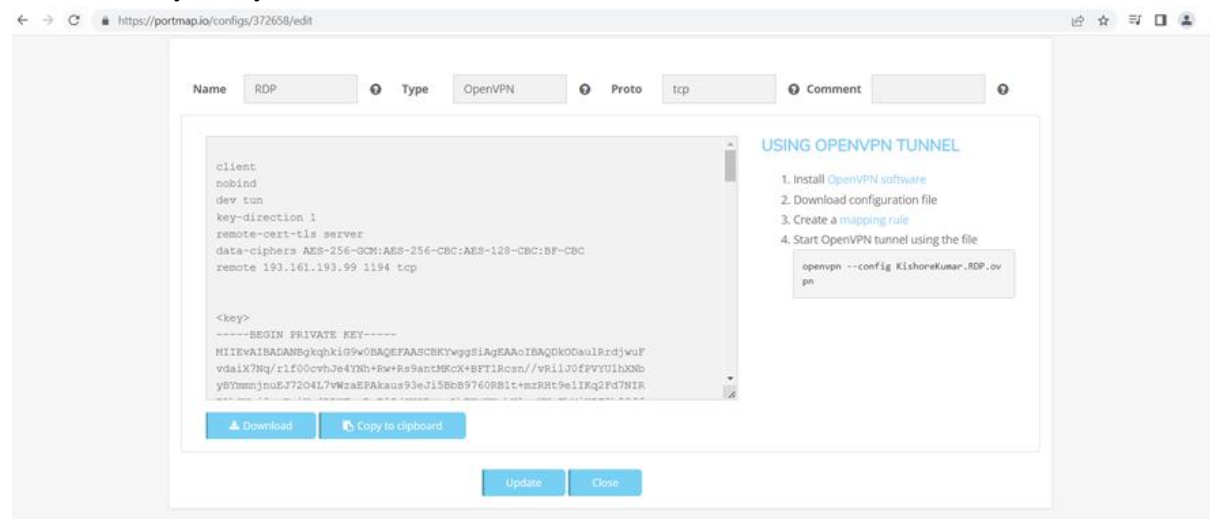
Step 4.2: After logging in, go to Configurations and create a new configuration as below.

Name: As per your choice, like "RDP."

Type: OpenVPN (We are going to OpenVPN configuration settings to enable public access to the RelationsNet URL.

Port: TCP

Click on the Generate button, which will generate an OpenVPN configuration file and download the same to your system.



Step 4.3: Now go to MAPPING RULE and click on "Create New Rule".

There is no need to change the default data. Just give the port on your PC as "9255" or the port number you have given during the RelationsNet docker container creation.

portmap.io REGIONS CONFIGURATIONS MAPPING RULES SUPPORT API BETA KISHOREKUMAR

Edit OpenVPN rule tcp://KishoreKumar-57490.portmap.io:57490 => 9255

Configuration	RDP	OpenVPN/tcp
Protocol	tcp	
Hostname	KishoreKumar-5	portmap.io
Port on Portmap.io	57490	
Port on your PC	9255	
Allowed IPs		

Update Cancel

Step 4.5: Now you just run OpenVPN software and select the OpenVPN configuration file. If you have not already done so, you must install Open VPN software.

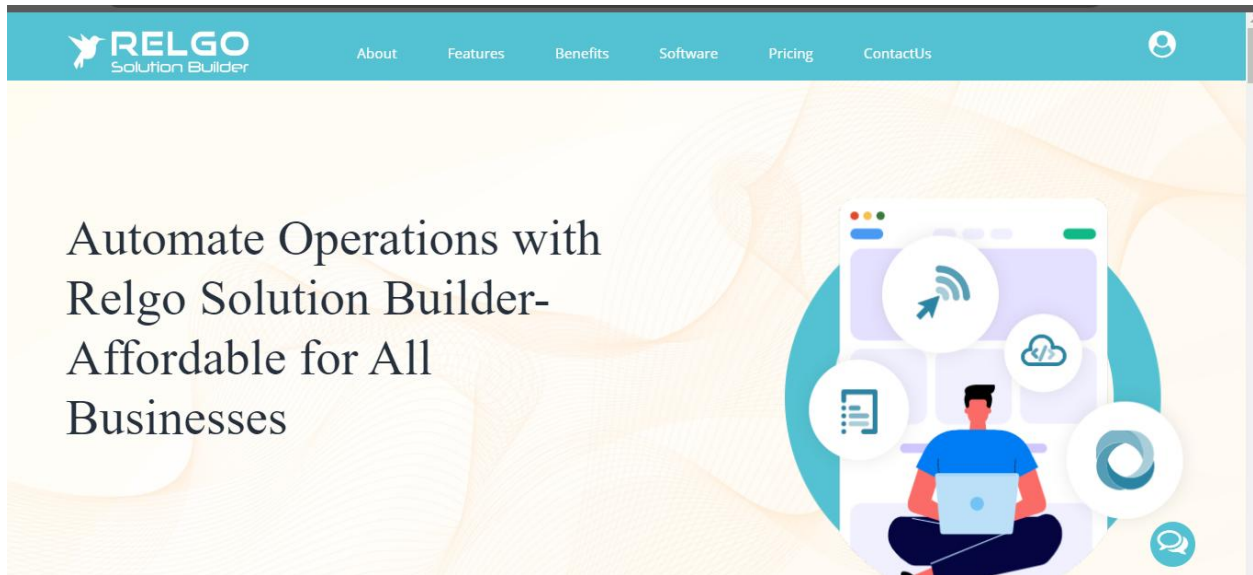
<https://openvpn.net/community-downloads/>

Now you should be able to access your relations net URL from anywhere through the system browser.

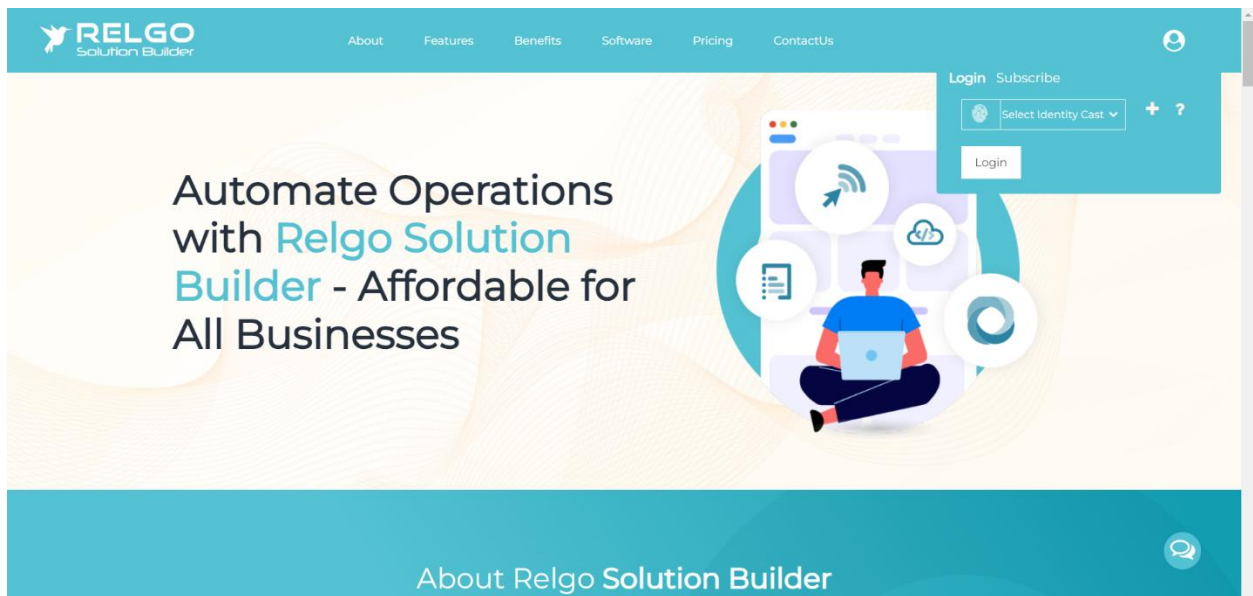
REFERENCE: <https://www.youtube.com/watch?v=YE2L0uT153w>

5. LMS APPLICATION DEPLOYMENT

5.1 Go to Solution builder website <https://www.elasticapps.io> (OR) <http://198.71.49.234:9032/>



Please click the icon, and once you see the subsequent screen, choose the "subscribe" option.



*****Note :** Create your identity with your email as you set up in your environment. Now Purchase “Automation Subscription” license to login to solution builder website.

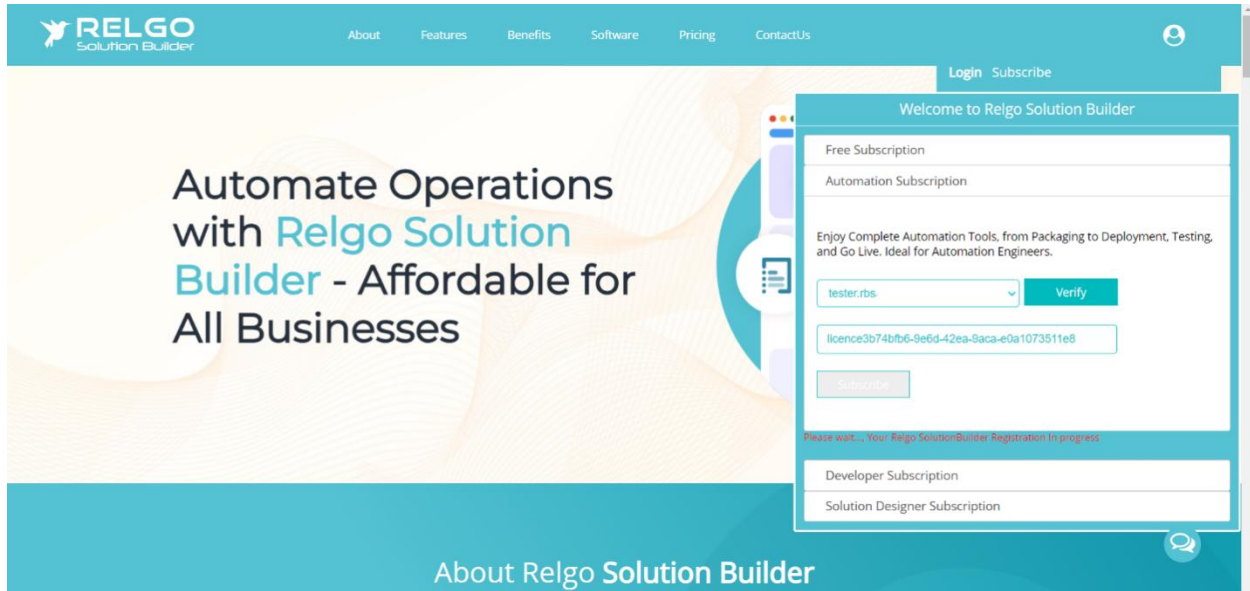
Click the Automation Subscription, select your identity cast, and then click on the verify option.

The screenshot shows the Relgo Solution Builder website. The main heading reads "Automate Operations with Relgo Solution Builder - Affordable for All Businesses". A modal window titled "Welcome to Relgo Solution Builder" is open, displaying a list of subscription options: "Free Subscription", "Automation Subscription", "Developer Subscription", and "Solution Designer Subscription". The "Automation Subscription" is selected. Below the list, there is a text description: "Enjoy Complete Automation Tools, from Packaging to Deployment, Testing, and Go Live. Ideal for Automation Engineers." A dropdown menu shows "tester.rbs" and a "Verify" button is visible.

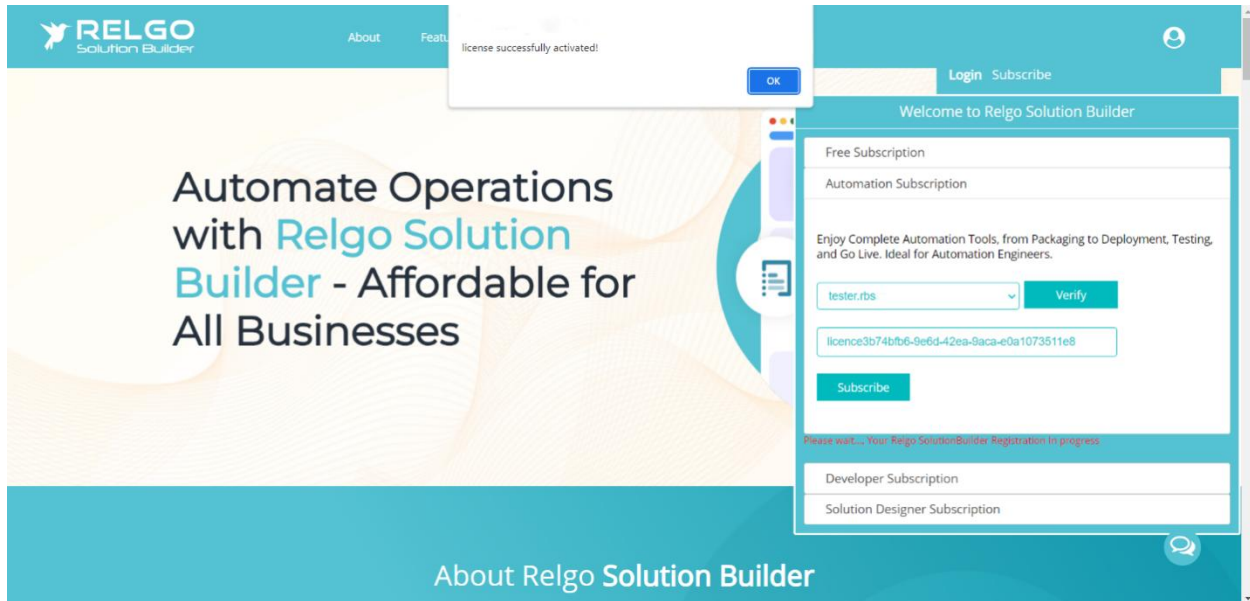
After clicking on "verify," a field will appear requesting you to enter your license ID into the provided field.

This screenshot shows the same website as the previous one, but the modal window has updated. The "Verify" button has been replaced by a "Subscribe" button. A new text input field labeled "Enter Licenceld" has appeared below the dropdown menu.

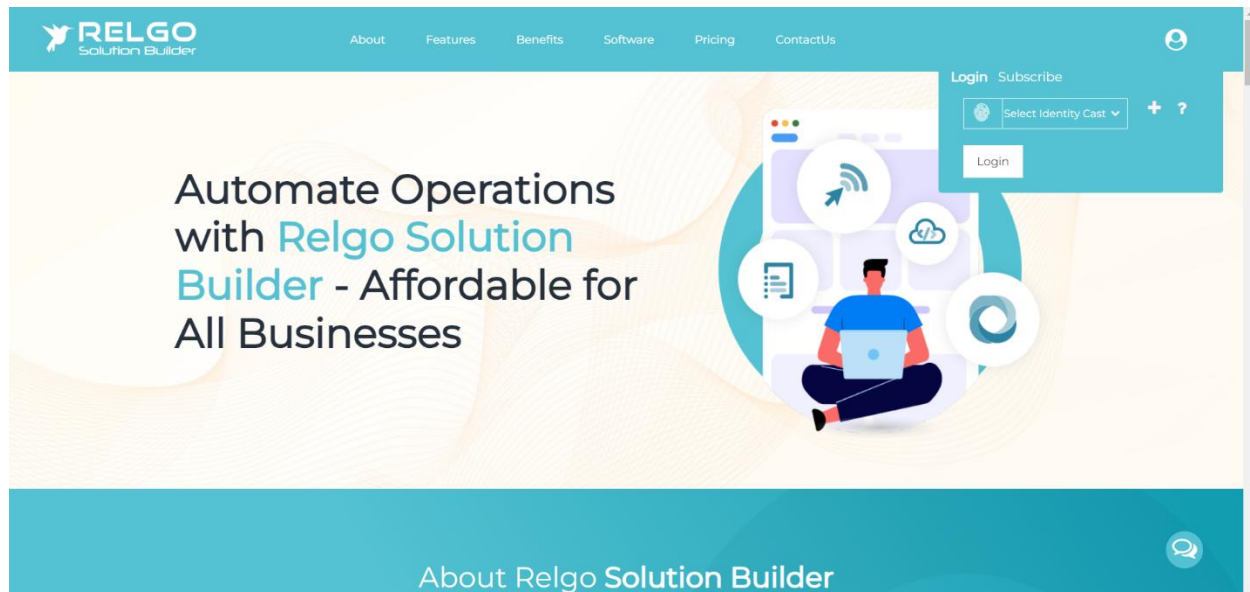
Enter your license ID and proceed to click on the subscribe button.



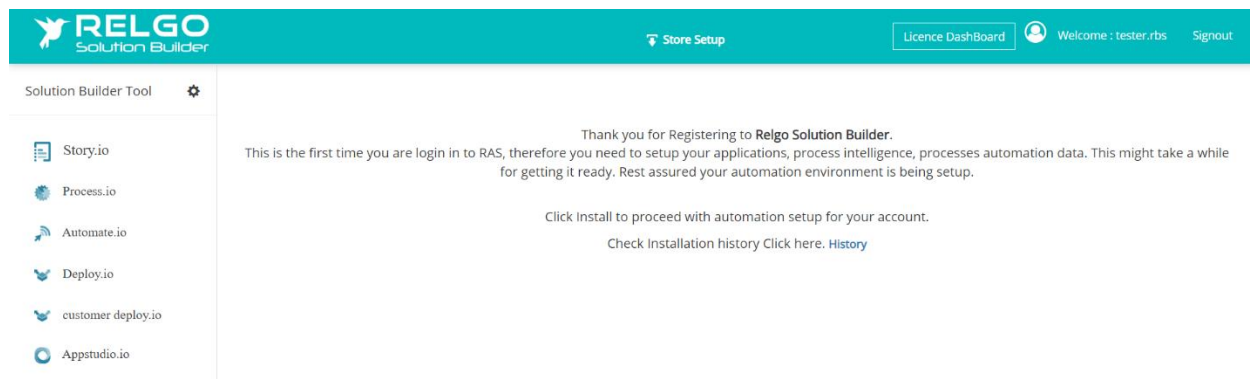
A popup will appear saying license is successfully activated



Refresh the page, click on the icon, and then proceed by clicking on the login button. Select your identity cast and click on the login option.



Complete the basic installations after successfully logging in.



5.2 Create Package

Goto **Process.io** → **Appspaces** → **New Appspace**

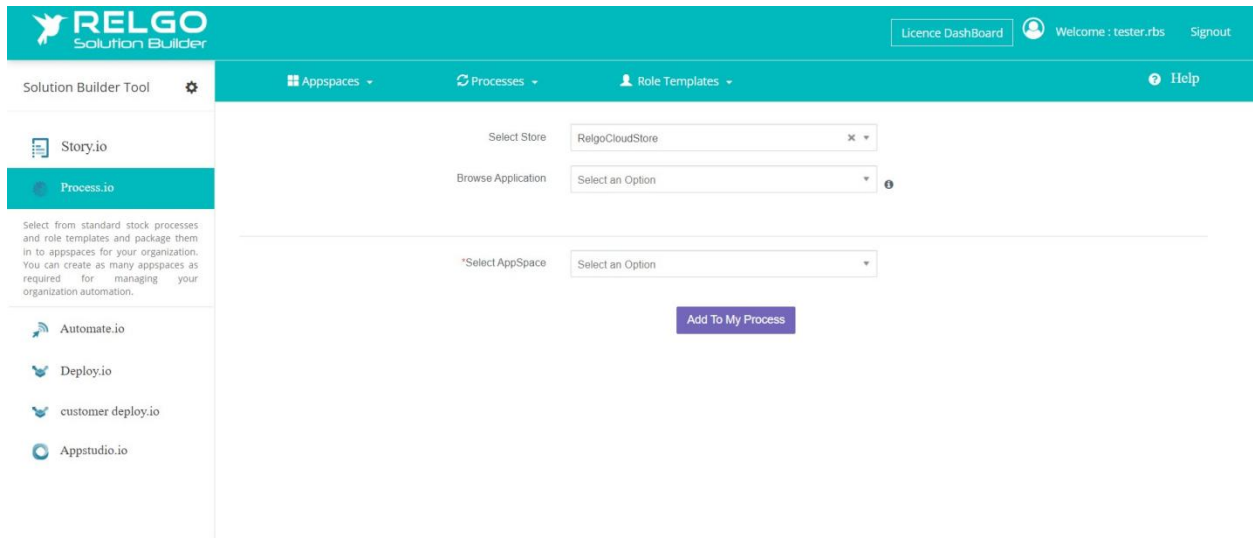
- Click on AppSpaces dropdown menu
- Choose 'New AppSpaces'
- Fill the fields like App Space name and description then click on "Publish App Space" button to create the App Space which is shown in below screen

The screenshot displays the RELGO Solution Builder interface. The top navigation bar is teal and contains the RELGO logo, a 'Licence Dashboard' button, a user profile icon with the text 'Welcome : tester.rbs', and a 'Signout' button. Below the navigation bar, there are several menu items: 'Solution Builder Tool' with a gear icon, 'Appspaces' with a dropdown arrow, 'Processes' with a refresh icon and a dropdown arrow, 'Role Templates' with a user icon and a dropdown arrow, and 'Help' with an information icon. The main content area is divided into two sections. On the left, there is a sidebar with a 'Story.io' section and a 'Process.io' section. The 'Process.io' section is highlighted in teal and contains the text: 'Select from standard stock processes and role templates and package them in to appspaces for your organization. You can create as many appspaces as required for managing your organization automation.' Below this text are four process options: 'Automate.io', 'Deploy.io', 'customer deploy.io', and 'Appstudio.io'. On the right, the 'New AppSpace' form is visible. It has a label '*Appspace Name' and a text input field containing 'LMS Application Package'. Below this is a label 'Description' and a larger text input field. At the bottom of the form, there are two buttons: 'Publish AppSpace' and 'Cancel'.

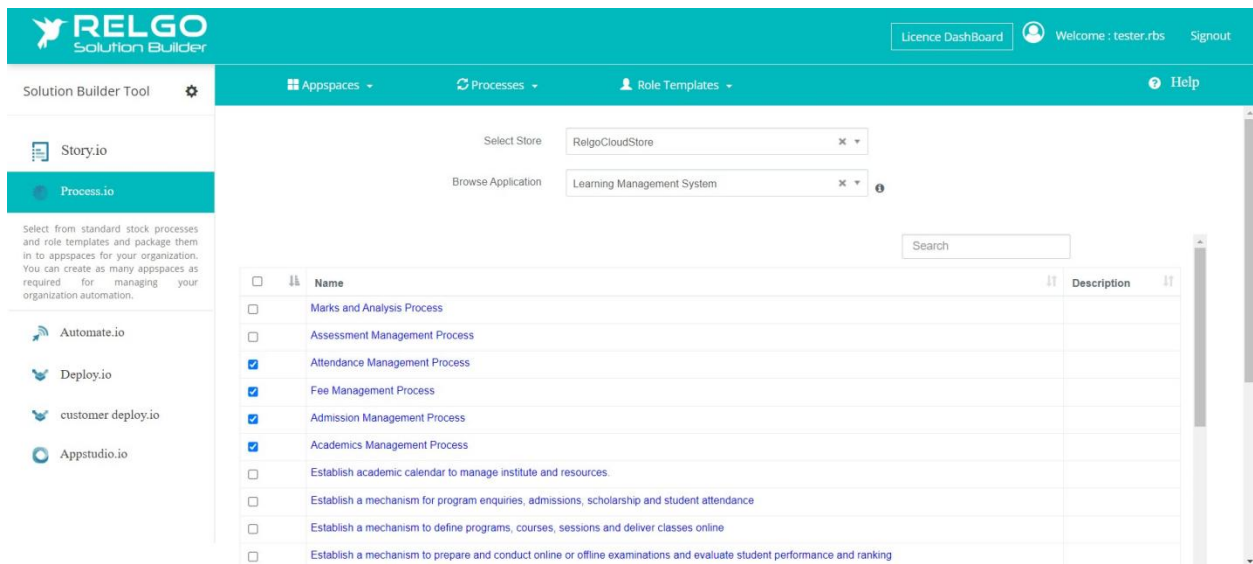
5.3 To Select Processes

Goto **Process.io** → **Processes**→**Select Processes**

- Choose the 'select process' under processes
- Opt for 'Cloud App store' as the store.



Select the “**Learning Management System**” application from the 'Browse Applications' column.



After selecting the application, select the appspace that you have created before, and click on 'add to my processes' as shown in the below image.

Example :- If the user wants Admission Management, Attendance Management, Fee Management and Academic Management. Select these Processes and click on the 'Add to My Process' button as shown below.

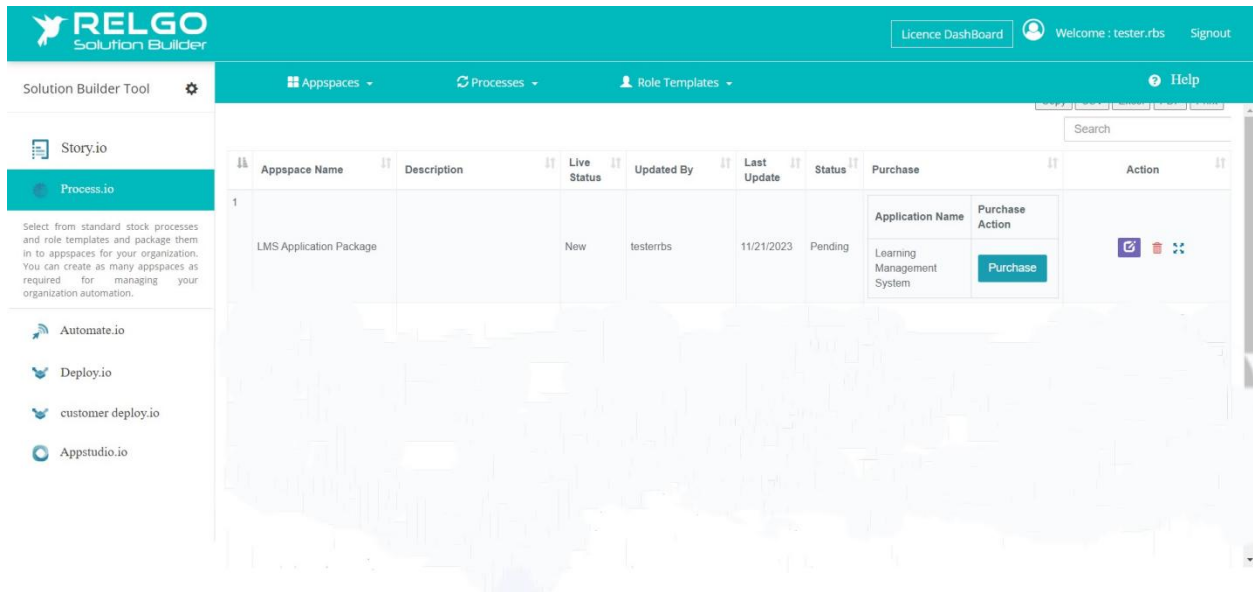
The screenshot shows the RELGO Solution Builder interface. The header includes the RELGO logo, a search bar, and user information (Welcome: tester.rbs, Signout). The navigation bar has tabs for Appspaces, Processes, and Role Templates. The left sidebar shows the 'Process.io' section, which is highlighted. Below the sidebar, there is a table of processes with checkboxes for selection. The selected processes are Attendance Management Process, Fee Management Process, Admission Management Process, and Academics Management Process. The table also includes a search bar and a dropdown menu for 'LMS Application Package'. At the bottom, there is a button labeled 'Add To My Process'.

5.4 Purchase application license

Goto **Process.io** → **Appspaces** → **My Appspaces**

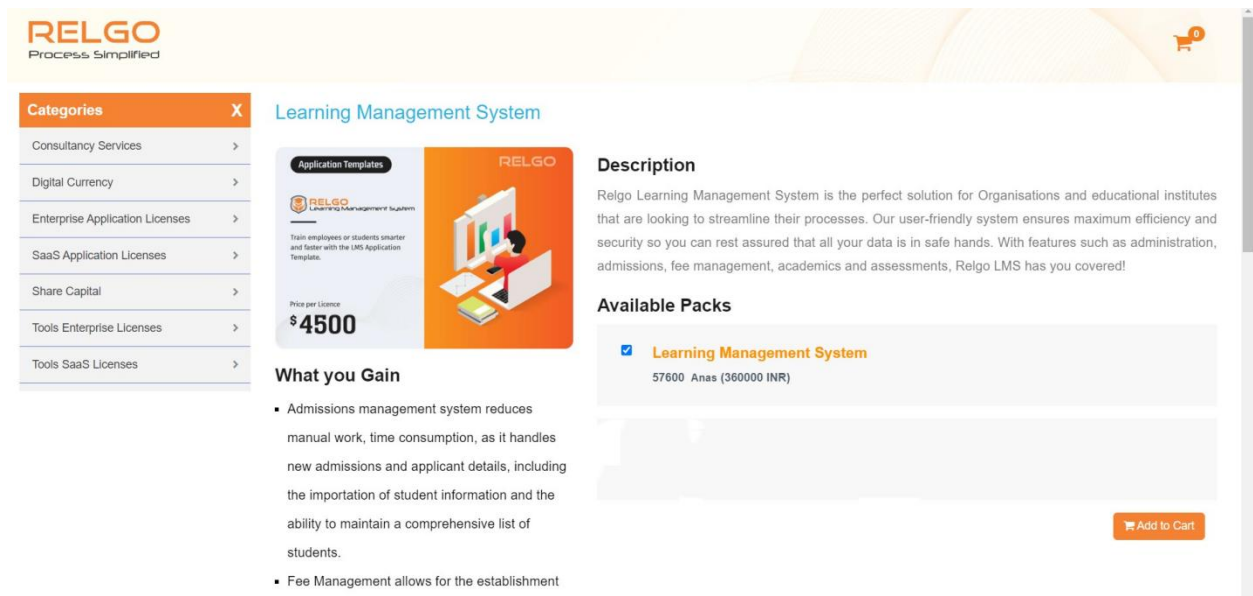
- Click on AppSpaces dropdown menu
- Select 'My AppSpaces'

You can buy the application by clicking the 'purchase' button as shown in the below screen.



After clicking on purchase, it will redirect you to the store where you can seamlessly complete your purchase.

5.4 (A) To buy the desired application, you should now add the application to the cart.



After clicking on add to cart button, the below screen will appear

RELGO
Process Simplified

Categories / My Shopping Cart

Learning Management System
Quantity : 1
57600.00 Anas (360000 INR)
Frequency : OneTimeCharge

Price Name	Price Type	Unit Price	Quantity	Amount	Tax	Total
Learning Management System	R.A.T	57600 Anas (360000 INR)	1	57600 Anas (360000 INR)	10368 (64800 INR)	67968 Anas (424800 INR)

Payment Summary

Total : 57,600.00Anas (360000.00 INR)
Total Tax : 10368.00Anas (64800.00 INR)
Shipping Charges : 0.00Anas
Grand Total : 67968Anas (424800.00 INR)

Continue to add more Items

You have not Selected the Identity cast.
Select the identity cast to proceed the payment

Please Select Token

Proceed to Payment

[No Token? Verify Identity and Get Token !](#)

- Here the user has to select the identity cast, if the user does not have any then create one by clicking on 'no token? Verify Identity and get token' button
- After creating the token, refresh the page
- Then select the created identity cast and click on 'Proceed to Payment' button
- A screen will appear as shown below, there click on 'Proceed'.

RELGO
Process Simplified

Welcome, testler.rba@relgo.com | Sign Out

Categories / My Shopping Cart / Payment type

Items in your order

Item	Quantity	Price Name	Unit Price	Total	Tax Amount	Grand Total
Learning Management System	1	Learning Management System	57600 Anas (360000 INR)	57600 Anas (360000 INR)	10368 Anas (64800 INR)	67968 Anas (424800 INR)

Promotion Code

Enter Promocode **Apply**

Shipping Charges **0**

Total **67968**

Select a Payment Method

Anas

Debit/Credit Card
NEFT/RTGS

Use Anas for Payment

Available Anas : 88000 (550000 INR)
Required Anas : 67968 (424800 INR)

Buy Anas **Add Shipping Address**

Proceed **Cancel**

Here check all the details, and click on 'confirm'.

Organization Name Customer Name

company address *Order Id

*Mobile Number Date

*Email Address

Billing Address Shipping Address

Item	UOM	Quantity	Price Names	Frequency	Unit Price	Amount	Tax Amount
Learning Management System	Numbers	1	Learning Management System	OneTimeCharge	57600	57600	Total: 10368

Payment Mode

Total Amount Total Tax

Grand Total Shipping Charges

[Confirm](#)

A screen will appear saying, your order has been received.



Your order has been received.

Thank you for your Purchase!

Your Order No is : **98149221**

We will be sending you an email confirmation of your order as well. To track your order status, Please visit Relgo. For any queries Please contact our Customer Services team.

Thanks,
Relgo Networks Pvt Ltd.

[Continue Shopping](#)

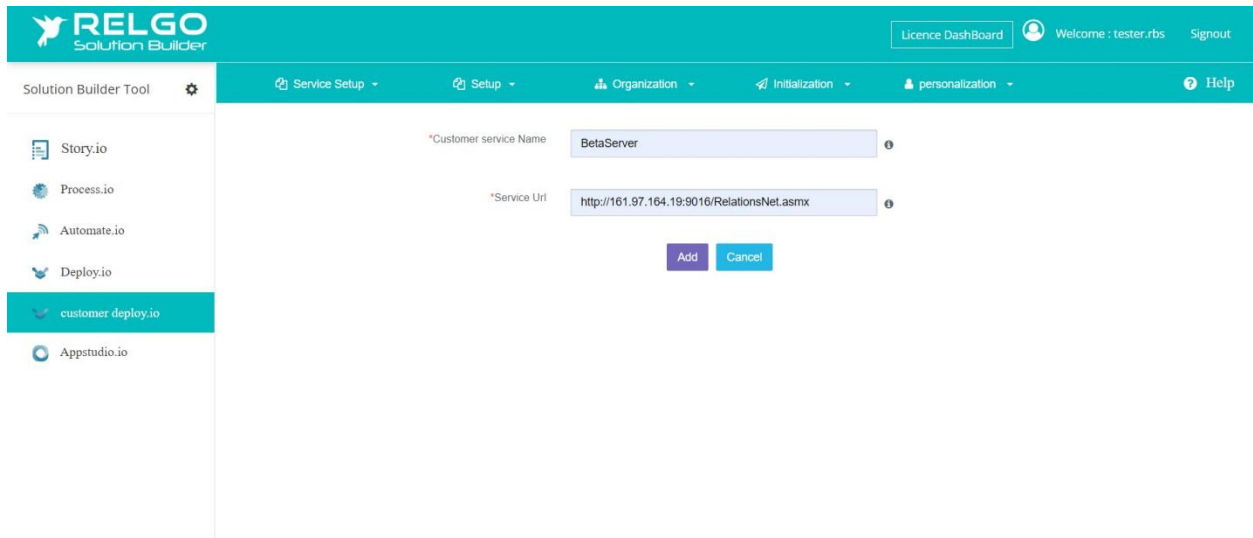
5.5 Deploy the application

After purchasing, again login to your Solution Builder account and deploy the package.

Please setup your **Service** in **Customer deploy.io**

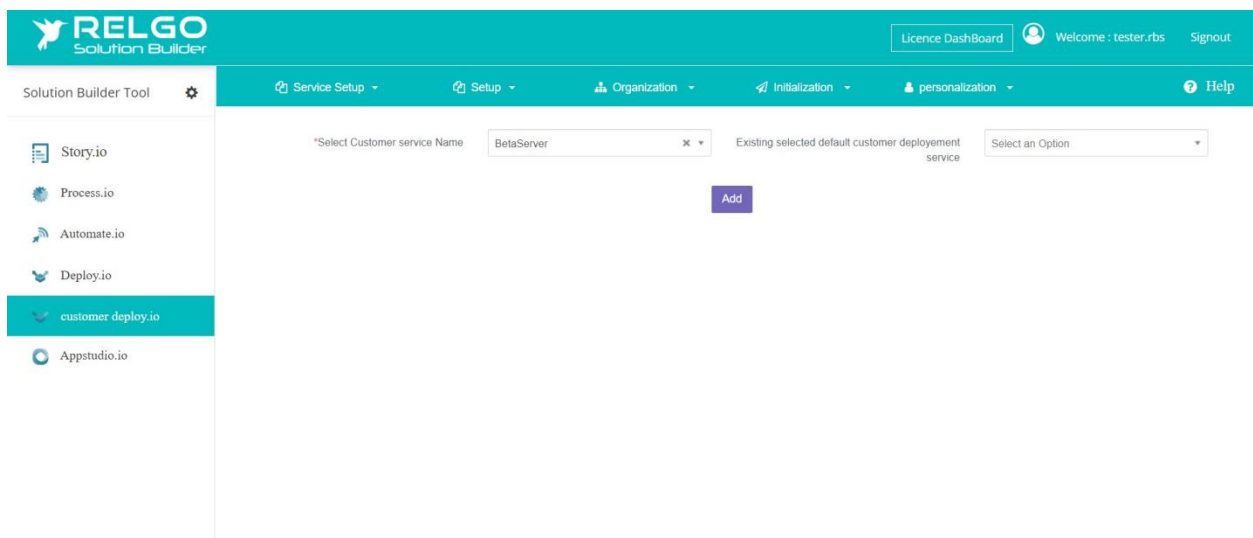
Go to **Customer deploy.io** → **Service Setup** → **Setup Customer Deployment**

- Click on 'Setup customer deployment' under service setup
- Provide the customer service name and service URL and click on Add button



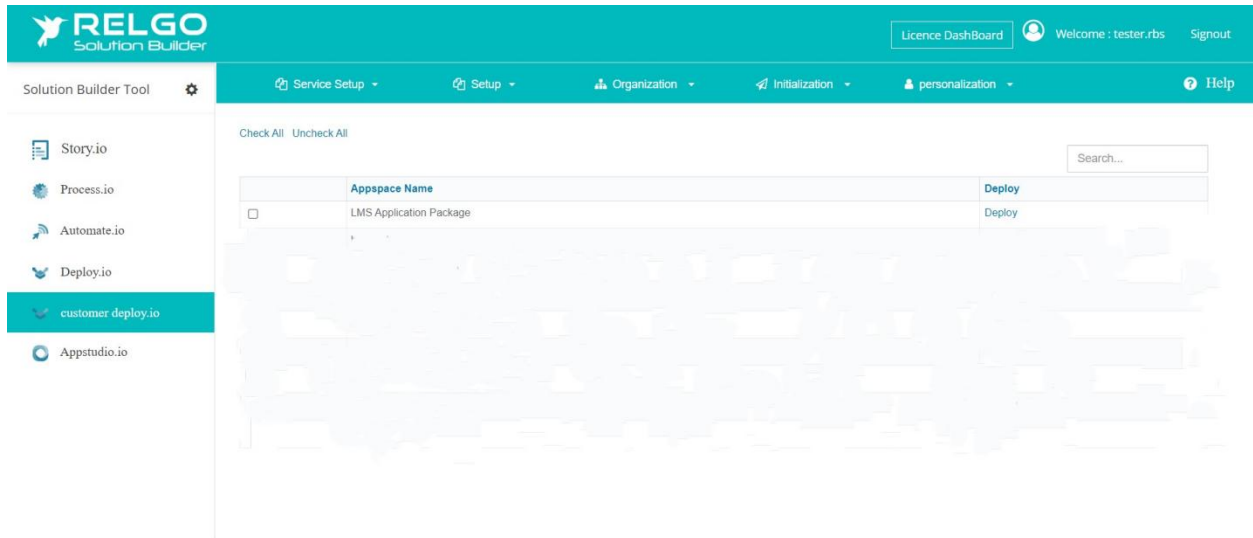
Go to **Customer deploy.io** → **Service Setup** → **Setup Default Customer Deployment**

- Click on 'Setup Default Customer Deployment' under service setup
- Provide the necessary details and click on the Add button.



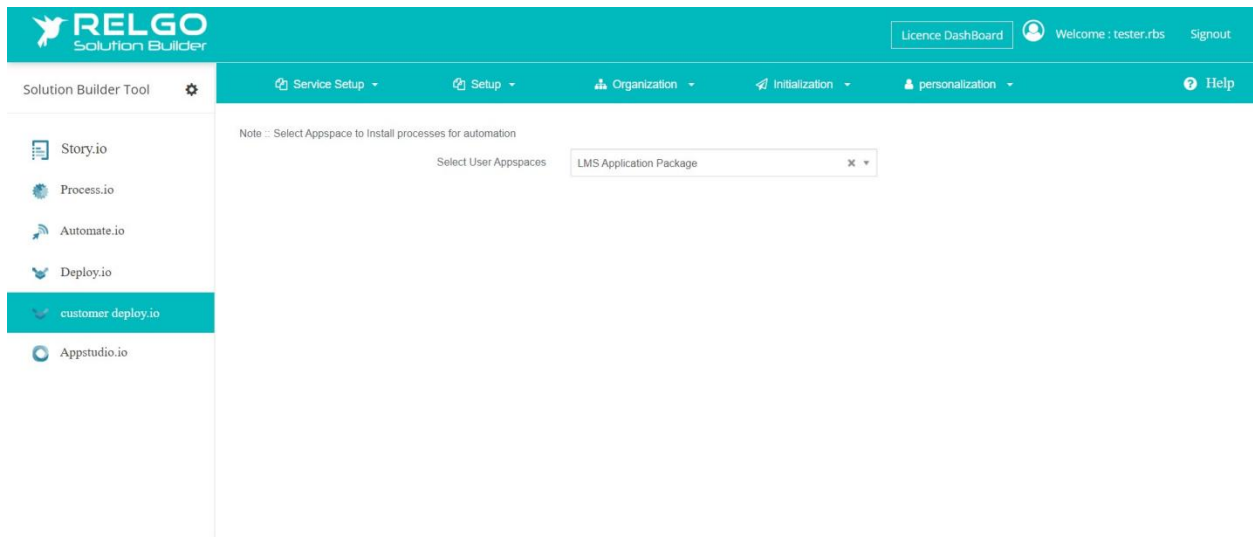
Go to **customer deploy.io** → **Setup** → **My AppSpaces**

- Click on 'My AppSpaces' under setup.
- Here the user has to select the application and click on 'Deploy'.
- A popup appears saying 'Data deployed successfully'

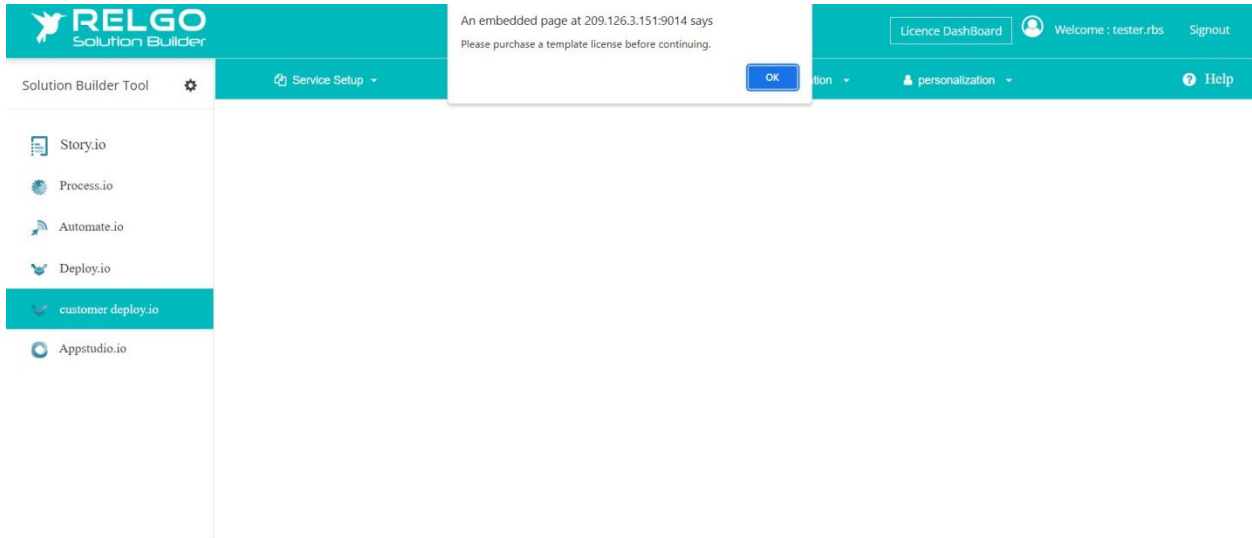


Go to **Customer deploy.io** → **Setup** → **Package Wise Installations**

- Click on Package wise Installations under setup
- User has to select the deployed package here for package wise installations

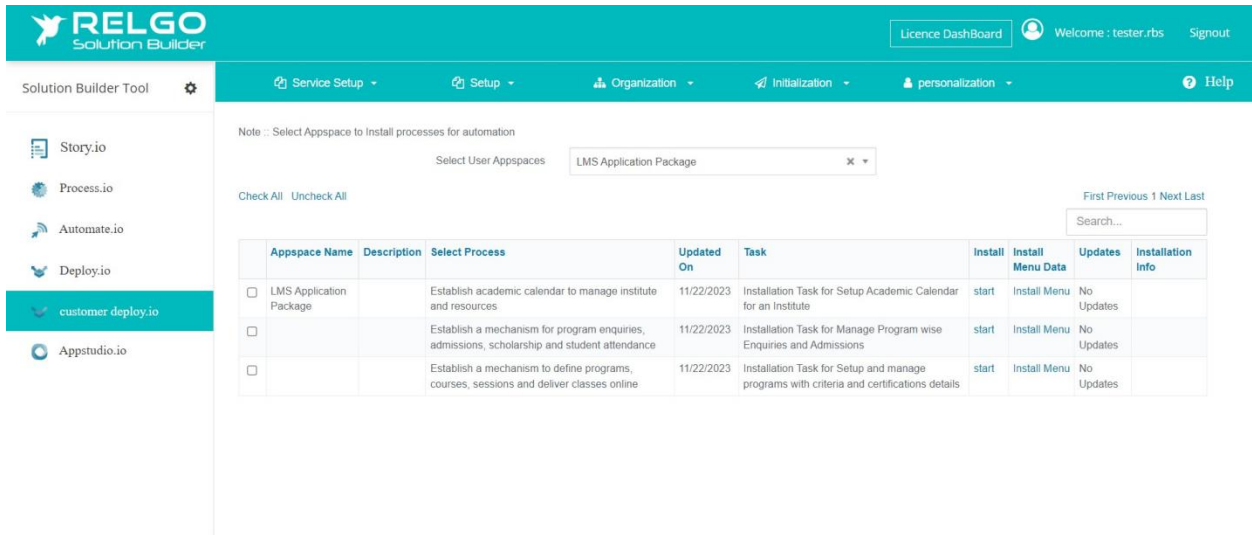


NOTE: If you try to deploy the application without purchasing the application template license, a popup message will appear, as shown below.

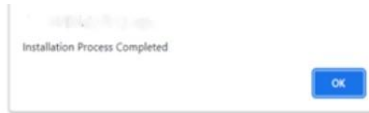


5.5(A) Application Installations

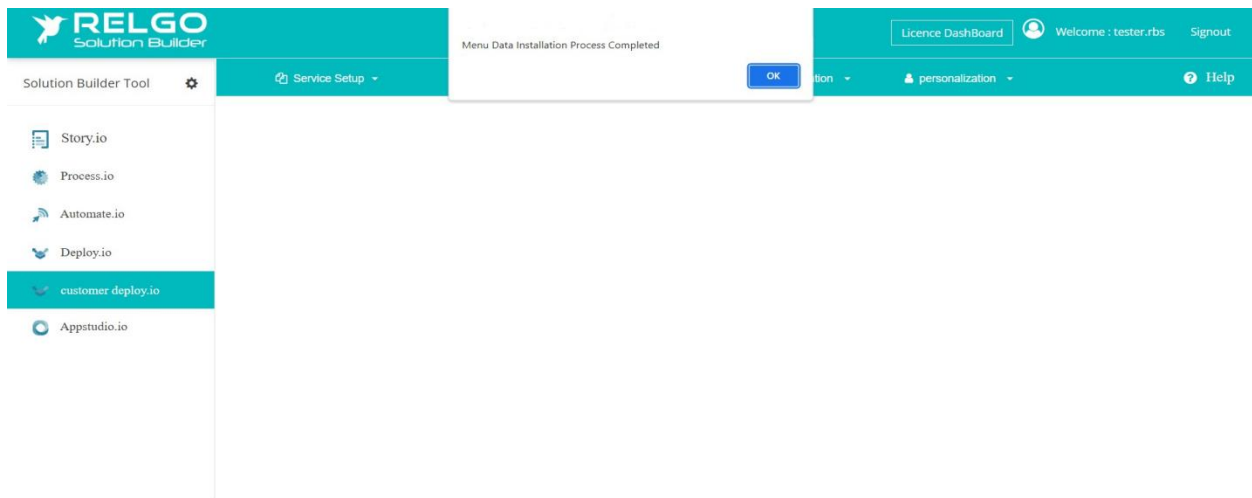
Install each process by clicking on 'Install', followed by 'Install Menu Data'



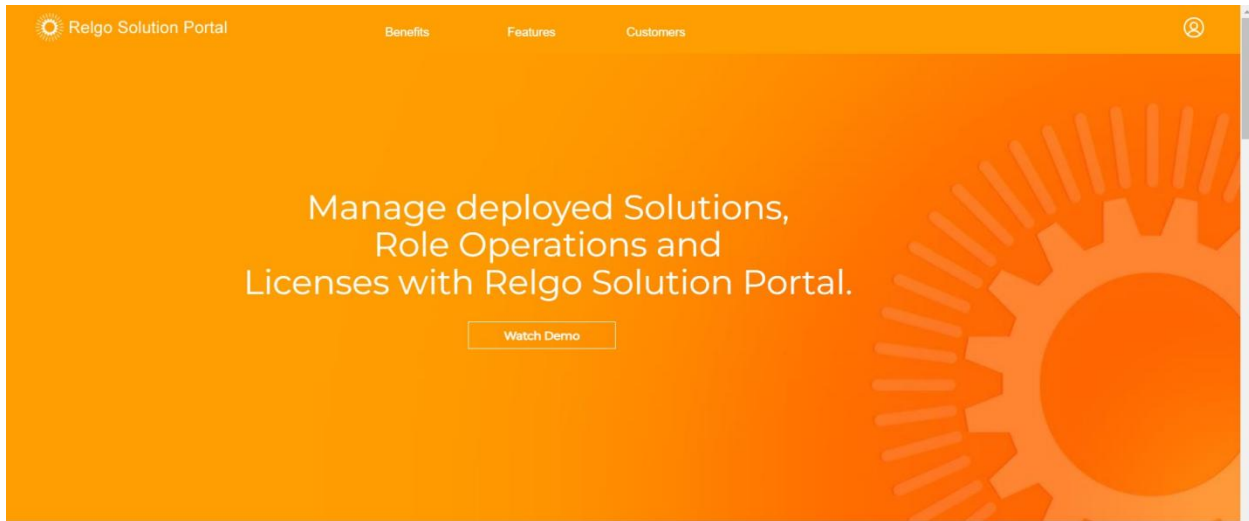
Click on 'Start' button, then a popup will appear saying installation process completed, as shown below.



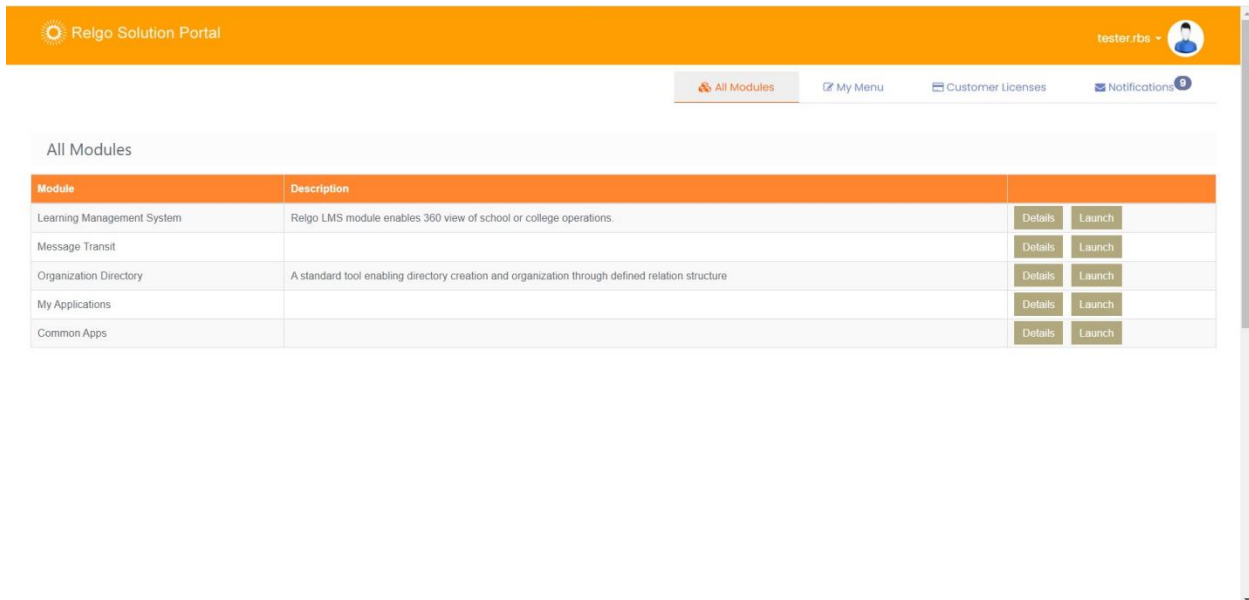
After that click on 'Install Menu', then you will get a popup saying Menu Data installation process completed, as shown below.



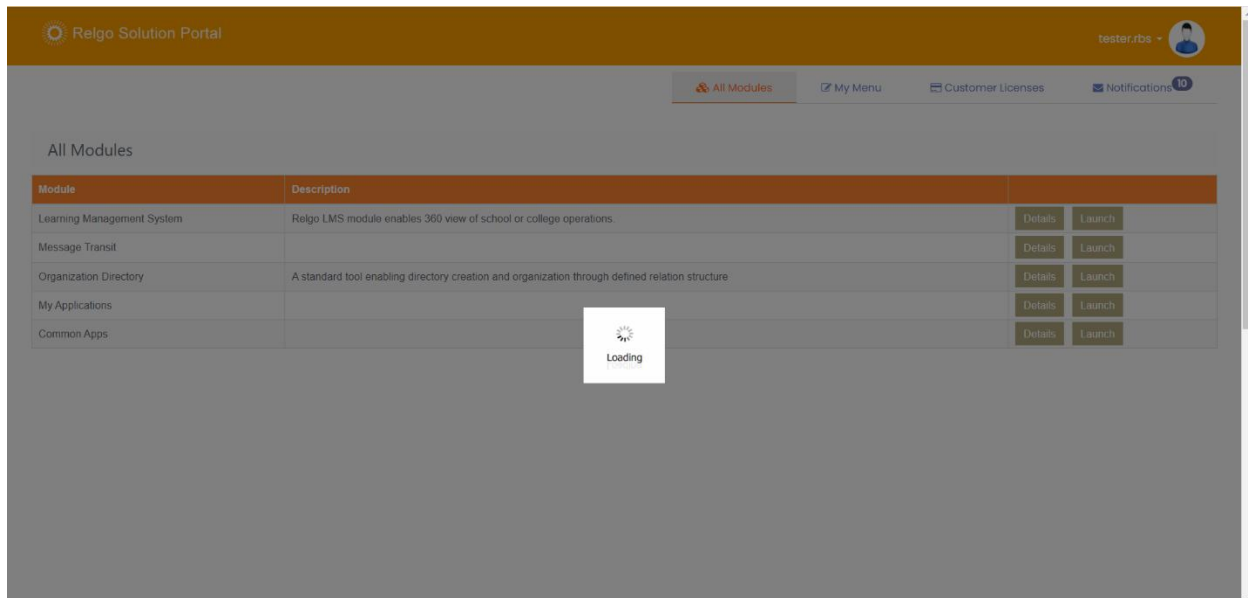
5.6 Login to Your Solution Portal account



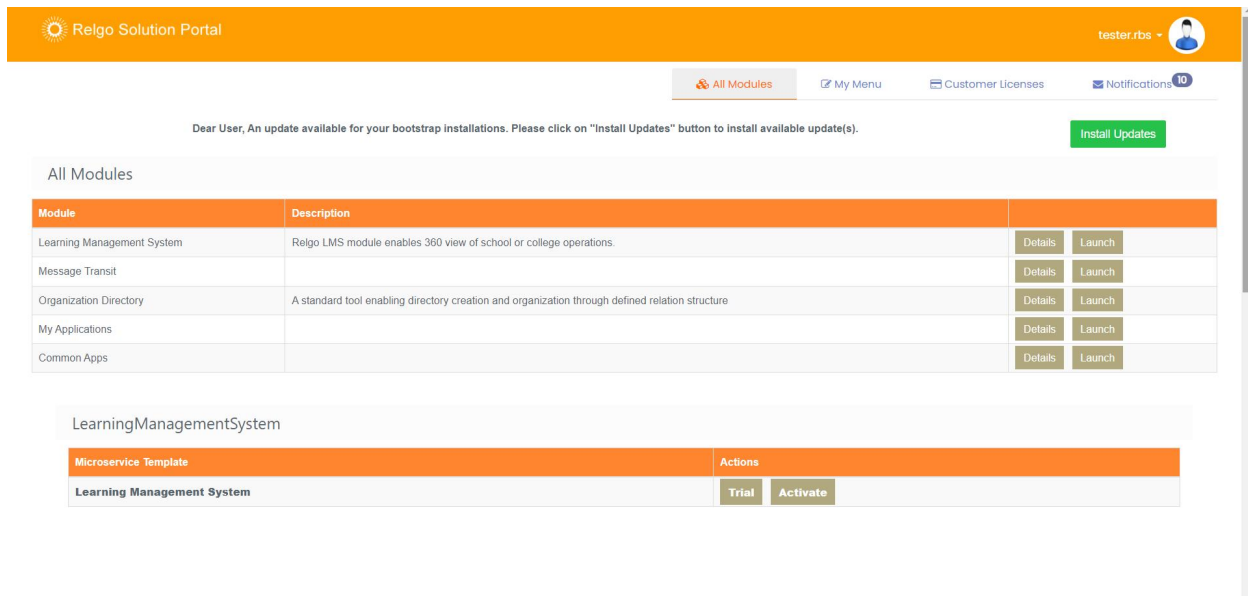
After successful login, the following screen appears



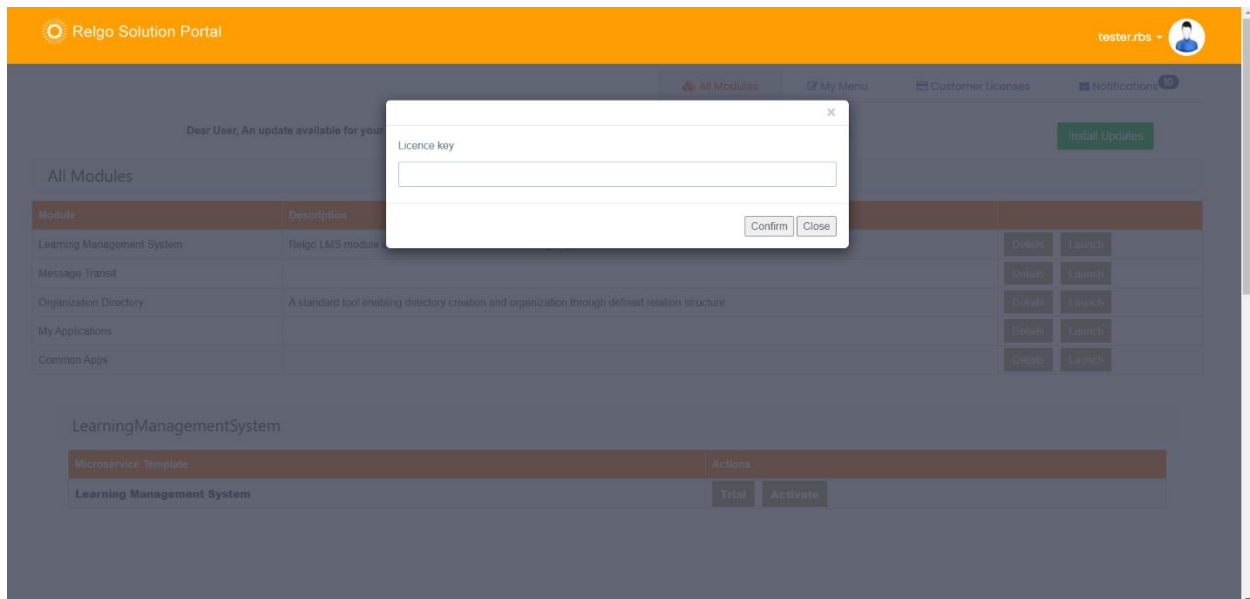
The page will load after you enable the template license.



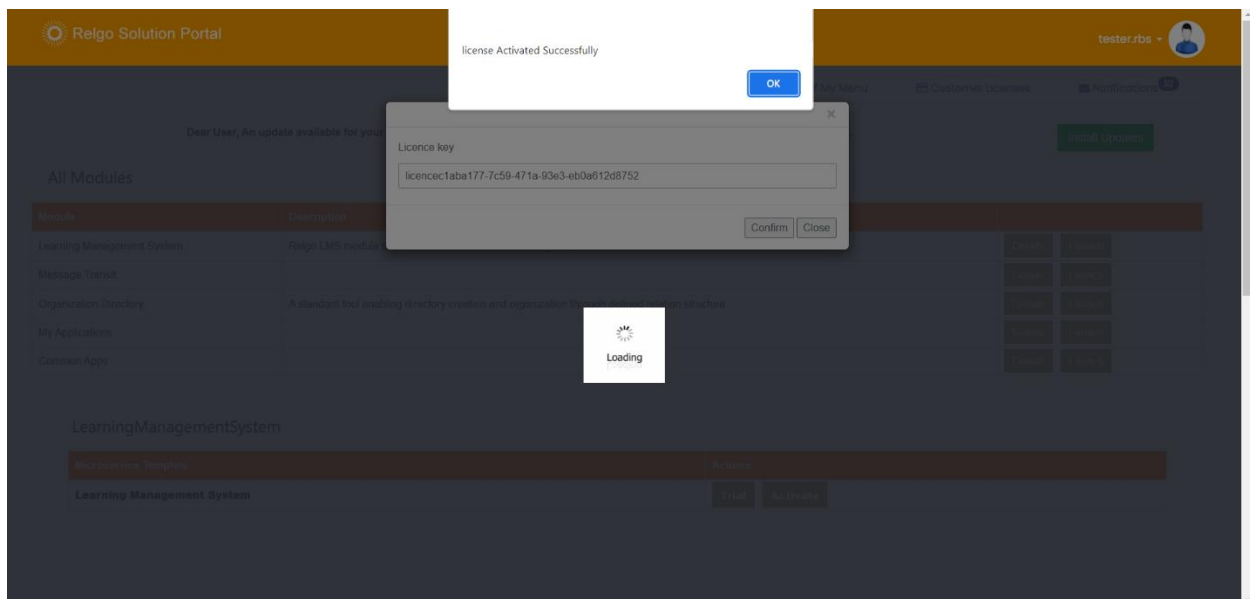
Once the page has loaded, you'll encounter the following screen, click on the "activate" button.



Upon selecting "Activate," a popup will appear, please enter the license key and then click on confirm button



A popup will display, indicating that the license has been successfully activated.



After activating the license, a subsequent screen will appear, please proceed by clicking on "launch."

The screenshot shows the Relgo Solution Portal interface. At the top, there is a navigation bar with the Relgo logo and the text "Relgo Solution Portal". On the right side of the navigation bar, the user's name "tester.rbs" and a profile icon are visible. Below the navigation bar, there are several utility buttons: "All Modules", "My Menu", "Customer Licenses", and "Notifications" (with a badge showing 10). A notification banner reads: "Dear User, An update available for your bootstrap installations. Please click on 'Install Updates' button to install available update(s)." A green "Install Updates" button is located to the right of the notification. Below the notification, there is a section titled "All Modules" containing a table with the following data:

Module	Description	Details	Launch
Learning Management System	Relgo LMS module enables 360 view of school or college operations.	Details	Launch
Message Transit		Details	Launch
Organization Directory	A standard tool enabling directory creation and organization through defined relation structure	Details	Launch
My Applications		Details	Launch
Common Apps		Details	Launch

Below the "All Modules" table, there is a search bar containing the text "LearningManagementSystem". Below the search bar, there is a table with the following data:

Microservice Template	Actions
Learning Management System	Launch

By clicking on launch, you will be directed to the application container as shown below.

The screenshot shows the Relgo Learning Management System application container. At the top left, there is the Relgo logo with the tagline "Process Simplified". At the top right, there is a "Logout" button. On the left side, there is a sidebar menu with the following items:

- Learning Management System (selected, with a close icon)
- Administration
- Program Management
- Admissions
- Exam Management

On the right side, there is a vertical "HELP" button.