

DOCUMENTATION



SAML Authentication

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SAML Authentication in osTicket

SAML Authentication

SAML stands for **Security Assertion Markup Language**. It is an XML-based open-standard for transferring identity data between two parties: an identity provider (IdP) and a service provider (SP). It eliminates the need for multiple passwords and, with the help of single sign-on (SSO) functionality, offers a secure, easy way to access multiple applications with common login credentials.

Identity Provider — The IdP is an entity that stores user identities or resources such as usernames, passwords, and SSH keys.

Service Provider — The SP is an application or a third-party entity that provides service to an end user. SPs need authentication from the IdP to facilitate authentication for the user.

Setting up of SAML Authentication in osTicket

We will be using Microsoft Azure Active Directory as Identity Provider and osTicket application as Service Provider. The steps are as follows:

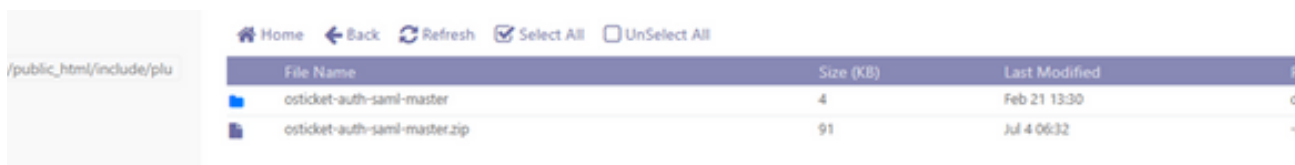
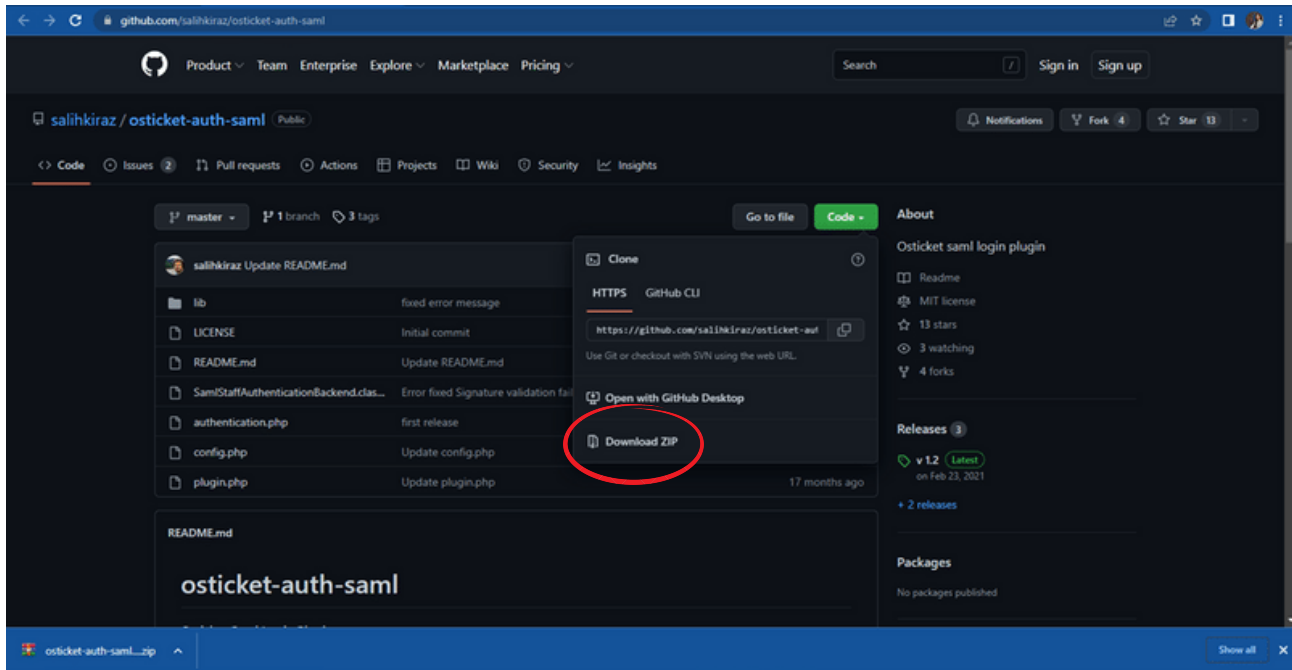
Step 1- Downloading and activating the osticket-auth-saml plugin.

Go to the link given below:

<https://github.com/salihkiraz/osticket-auth-saml>

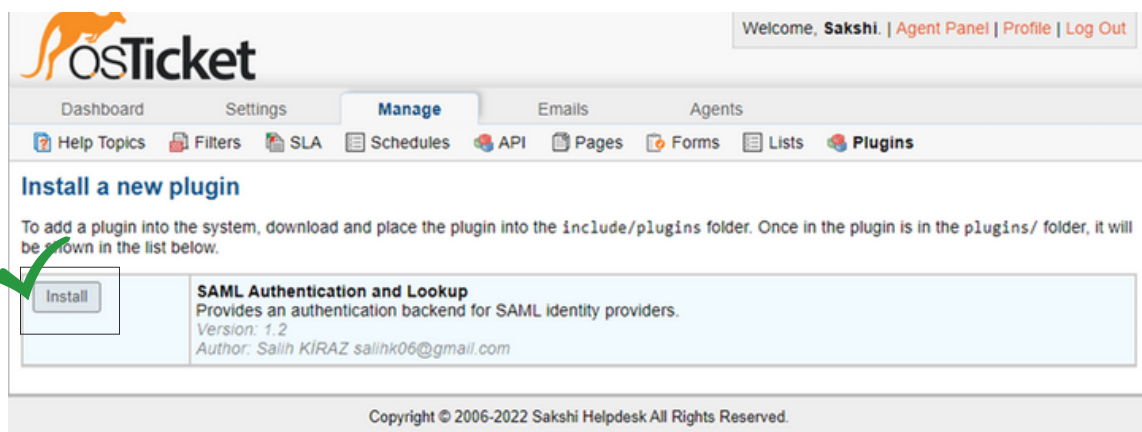
Download the zip file and upload the file in plugins folder and extract it.

(Cyber panel > Websites > List Websites > File Manager > public_html > include > plugins)

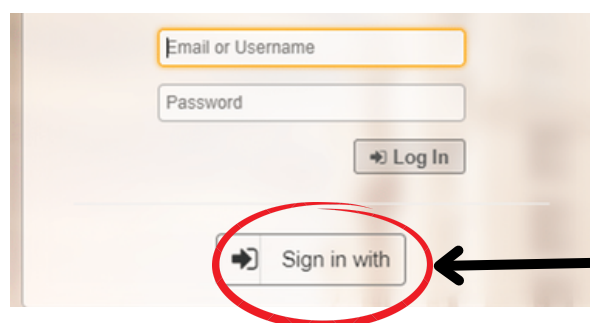


Now login to your osTicket helpdesk and download and install the plugin.

Admin Panel > Manage > Plugins > Add New Plugin

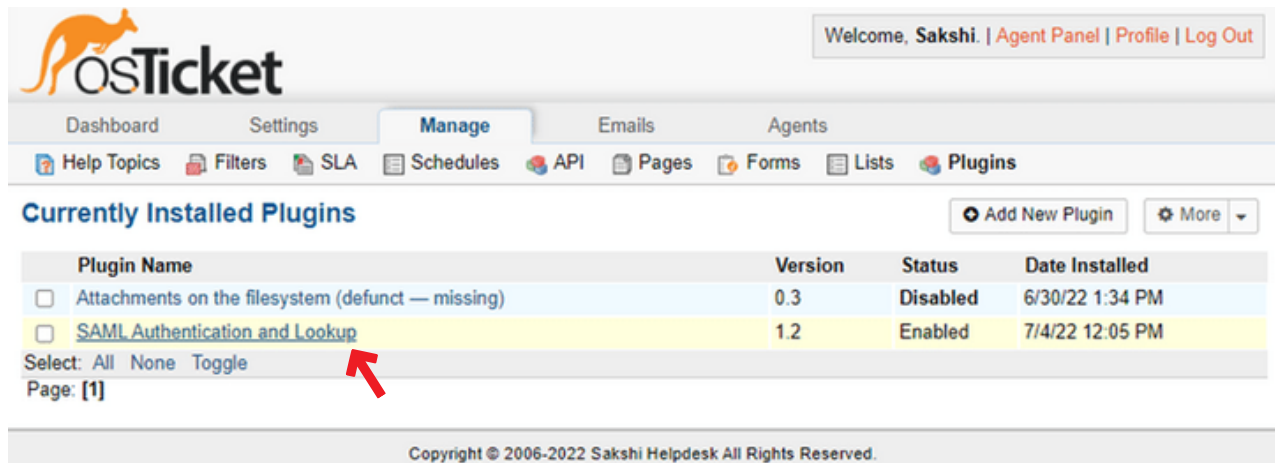


After installing, **enable the plugin** and log out.



This button will start appearing now onwards in the login page. .

Admin Panel > Manage > Plugins > SAML Authentication and Lookup



oSTicket Admin Panel. Welcome, Sakshi. | Agent Panel | Profile | Log Out

Dashboard Settings **Manage** Emails Agents

Help Topics Filters SLA Schedules API Pages Forms Lists Plugins

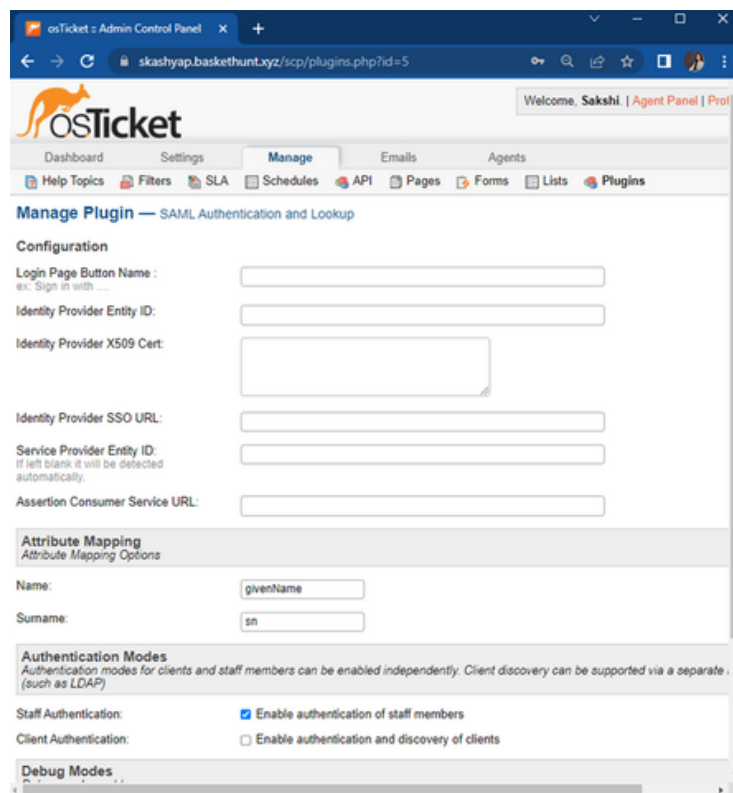
Currently Installed Plugins Add New Plugin More

Plugin Name	Version	Status	Date Installed
<input type="checkbox"/> Attachments on the filesystem (defunct — missing)	0.3	Disabled	6/30/22 1:34 PM
<input type="checkbox"/> SAML Authentication and Lookup	1.2	Enabled	7/4/22 12:05 PM

Select: All None Toggle Page: [1]

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The window appears as shown below:



oSTicket Admin Control Panel

skashyap.baskethunt.xyz/scp/plugins.php?id=5

Welcome, Sakshi. | Agent Panel | Profile | Log Out

Dashboard Settings **Manage** Emails Agents

Help Topics Filters SLA Schedules API Pages Forms Lists Plugins

Manage Plugin — SAML Authentication and Lookup

Configuration

Login Page Button Name:

Identity Provider Entity ID:

Identity Provider X509 Cert:

Identity Provider SSO URL:

Service Provider Entity ID:

Assertion Consumer Service URL:

Attribute Mapping

Attribute Mapping Options

Name:

Surname:

Authentication Modes

Authentication modes for clients and staff members can be enabled independently. Client discovery can be supported via a separate (such as LDAP)

Staff Authentication: ☒ Enable authentication of staff members

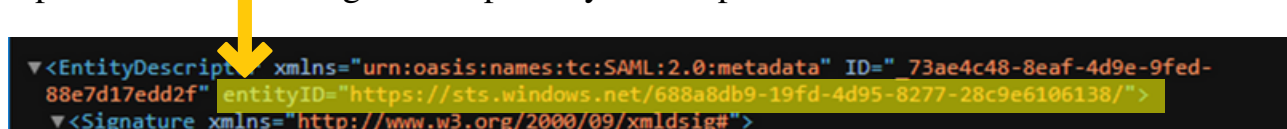
Client Authentication: ☐ Enable authentication and discovery of clients

Debug Modes

Fill the details in the above window from the xml file using the link below:

<https://login.microsoftonline.com/688a8db9-19fd-4d95-8277-28c9e6106138/federationmetadata/2007-06/federationmetadata.xml>

Open the xml file and get the Idp Entity Id at topmost row as shown-



```
<EntityDescriptor xmlns="urn:oasis:names:tc:SAML:2.0:metadata" ID="73ae4c48-8eaf-4d9e-9fed-88e7d17edd2f" entityID="https://sts.windows.net/688a8db9-19fd-4d95-8277-28c9e6106138/">
  <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
```

Idp X509 Certificate:

```
keyInfo>  
X509Data>  
<X509Certificate>MIIDBTCCAe2gAwIBAgIQH4FIYNA+UJIF0G3vy9ZrhTANBgkqhkiG9w0BAQsFADAtMSswKQYDVQQ  
/X509Data>  
keyInfo>
```

Idp SSO URL:

```
<SingleLogoutService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"  
Location="https://login.microsoftonline.com/688a8db9-19fd-4d95-8277-28c9e6106138/saml2"/>  
<SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"  
Location="https://login.microsoftonline.com/688a8db9-19fd-4d95-8277-28c9e6106138/saml2"/>  
<SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
```

Complete the details and save changes.

Dashboard

Settings

Manage

Emails

Agents

Help Topics

Filters

SLA

Schedules

API

Pages

Forms

Lists

Plugins

Manage Plugin — SAML Authentication and Lookup

Configuration

Login Page Button Name :
ex: Sign in with

Microsoft

Identity Provider Entity ID:

https://sts.windows.net/688a8db9-19fd-4d95-8277-28c9e6106138/

Identity Provider X509 Cert:

MIIDBTCCAe2gAwIBAgIQH4FIYNA+UJIF0G3vy9ZrhTANBgkqhkiG9w0BAQsFADAtMSswKQYDVQQDEyJhY2NvdW50cy5hY2Nlc3Njb250cm9sLndpbmRvd3MubmV0MB4XDltyM

Identity Provider SSO URL:

https://login.microsoftonline.com/688a8db9-19fd-4d95-8277-28c9e6106

Service Provider Entity ID:
If left blank it will be detected automatically.

Assertion Consumer Service URL:

https://skashyap.baskethunt.xyz/api/auth/saml/

Attribute Mapping

Attribute Mapping Options

Name:

givenName

Surname:

sn

Authentication Modes

Authentication modes for clients and staff members can be enabled independently. Client discovery can be supported via a separate backend (such as LDAP)

Staff Authentication:

☒ Enable authentication of staff members

Client Authentication:

☒ Enable authentication and discovery of clients

Debug Modes

Debug mode enable

Debug:

☐ Debug mode

Save Changes

Reset

Cancel

Now, working on the Identity Provider (Idp), here we have used Microsoft Azure Active Directory. Get access to your Microsoft Azure AD account and login.

Create your own new application on Azure AD by following the steps below:

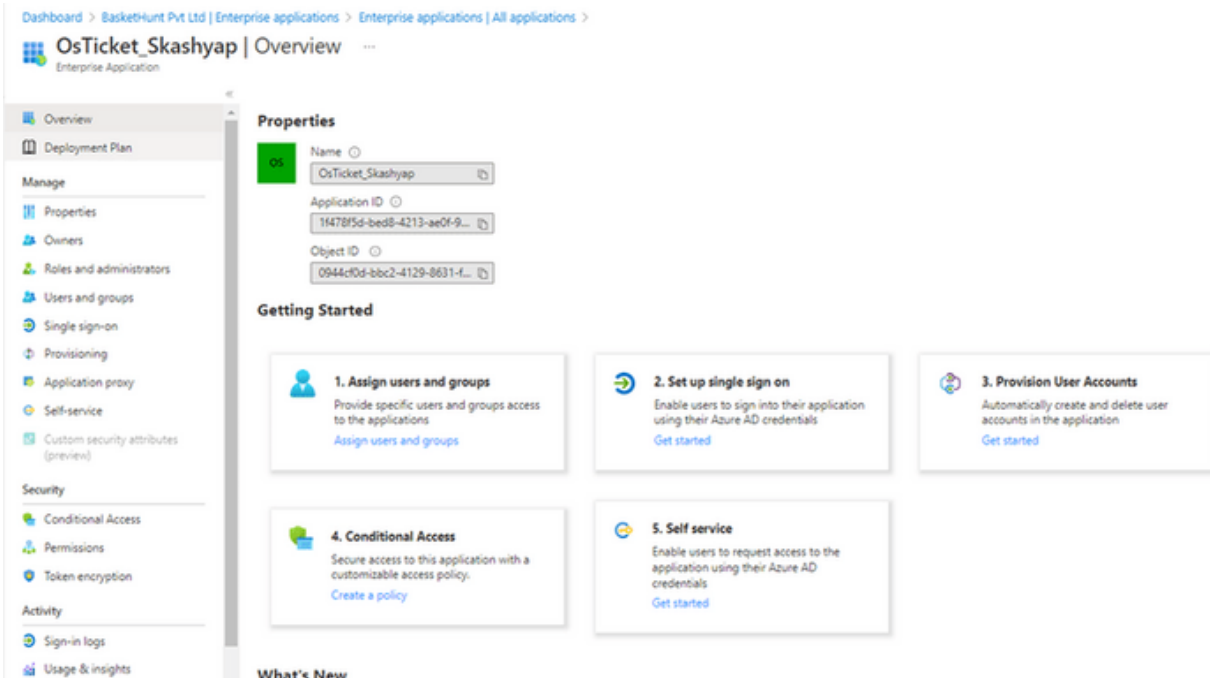
The image shows two screenshots from the Azure Active Directory portal. The left screenshot shows the 'Enterprise applications' section in the left-hand navigation pane, with a red arrow pointing to it. The right screenshot shows the 'Browse Azure AD Gallery' page, with a red arrow pointing to the 'Create your own application' button. A black arrow points from the 'Enterprise applications' section to the 'Browse Azure AD Gallery' page. Another black arrow points from the 'Create your own application' button to the 'Create your own application' form below.

Now, give the application name and click on 'Create'.

The image shows the 'Create your own application' form. The form has a title bar 'Create your own application' with a close button. Below the title bar is a 'Got feedback?' link. The main text says: 'If you are developing your own application, using Application Proxy, or want to integrate an application that is not in the gallery, you can create your own application here.' Below this is a question: 'What's the name of your app?' with a text input field containing 'OsTicket_Skashyap' and a green checkmark. Below the input field is a question: 'What are you looking to do with your application?' with three radio button options: 'Configure Application Proxy for secure remote access to an on-premises application', 'Register an application to integrate with Azure AD (App you're developing)', and 'Integrate any other application you don't find in the gallery (Non-gallery)'. The third option is selected. At the bottom of the form is a green 'Create' button.

The new application is created.

Open the application and a window similar to the one shown below will appear.



1. Assign Users and Groups



2. Set up Single Sin On

Deployment Plan

Manage

- Properties
- Owners
- Roles and administrators
- Users and groups
- Single sign-on**
- Provisioning
- Application proxy
- Self-service
- Custom security attributes (preview)

Security

- Conditional Access
- Permissions
- Token encryption

Activity

- Sign-in logs

Set up Single Sign-On with SAML

An SSO implementation based on federation protocols improves security, reliability, and end user experiences and is easier to implement. Choose SAML single sign-on whenever possible for existing applications that do not use OpenID Connect or OAuth. [Learn more.](#)

Read the [configuration guide](#) for help integrating OsTicket_Skashyap.

- Basic SAML Configuration** [Edit](#)
 - Identifier (Entity ID) `https://skashyap.baskethunt.xyz/`
 - Reply URL (Assertion Consumer Service URL) `https://skashyap.baskethunt.xyz/api/auth/saml/`
 - Sign on URL `Optional`
 - Relay State (Optional) `Optional`
 - Logout Url (Optional) `Optional`
- Attributes & Claims** [Edit](#)
 - givenname `user.givenname`
 - surname `user.surname`
 - emailaddress `user.mail`
 - name `user.userprincipalname`
 - Unique User Identifier `user.userprincipalname`
- SAML Signing Certificate** [Edit](#)

Add the identifier (entity id) and Reply URL and save changes.

Basic SAML Configuration

[Save](#) [Got feedback?](#)

Want to leave this preview of the SAML Configuration experience? [Click here to leave the preview.](#)

Identifier (Entity ID) *

The unique ID that identifies your application to Azure Active Directory. This value must be unique across all applications in your Azure Active Directory tenant. The default identifier will be the audience of the SAML response for IDP-initiated SSO.

Default

`https://skashyap.baskethunt.xyz/` [Add identifier](#)

Reply URL (Assertion Consumer Service URL) *

The reply URL is where the application expects to receive the authentication token. This is also referred to as the "Assertion Consumer Service" (ACS) in SAML.

Index Default

`https://skashyap.baskethunt.xyz/api/auth/saml/` [Add reply URL](#)

Sign on URL (Optional)

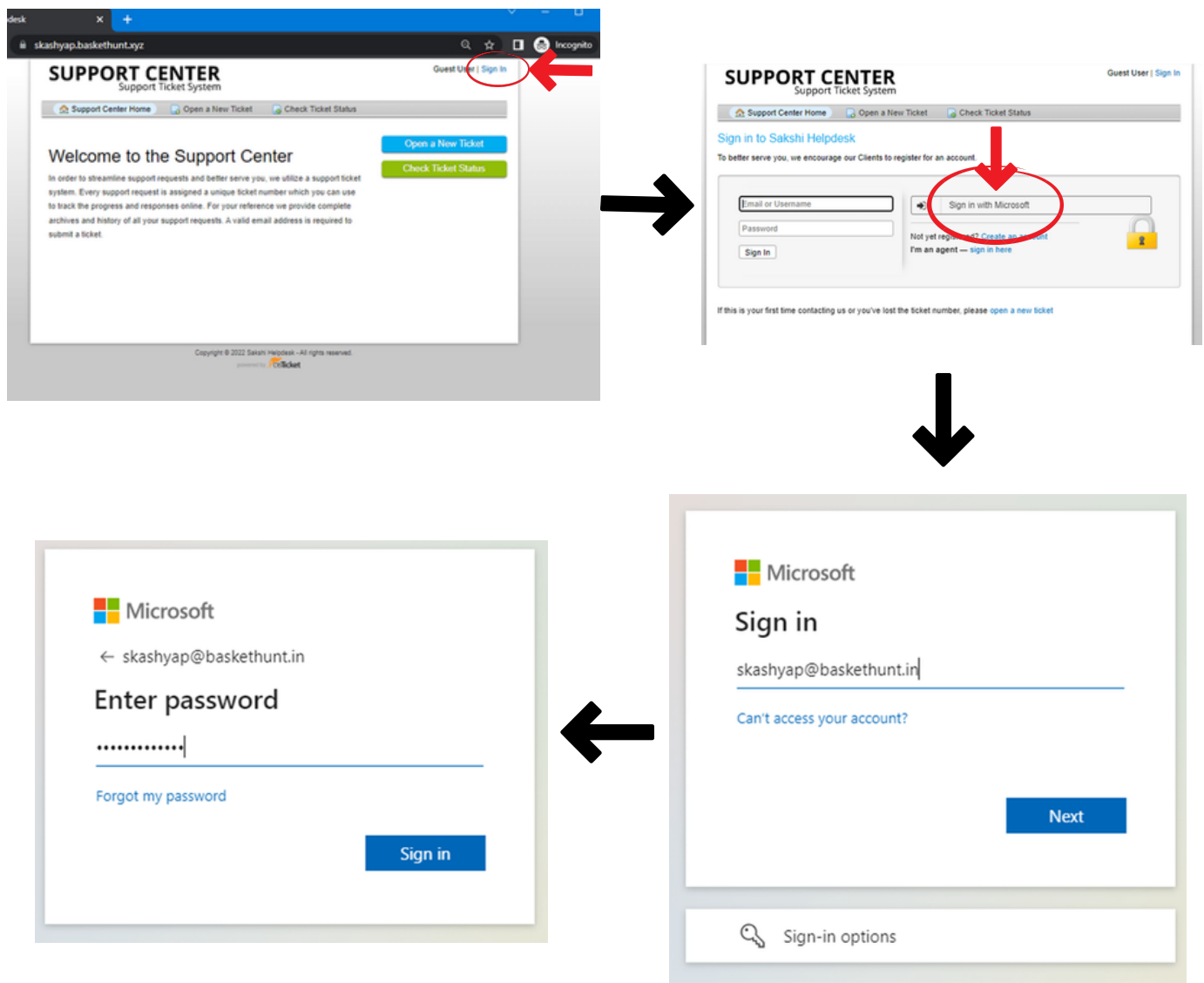
Sign on URL is used if you would like to perform service provider-initiated single sign-on. This value is the sign-in page URL for your application. This field is unnecessary if you want to perform identity provider-initiated single sign-on.

Enter a sign on URL

Relay State (Optional)

The Relay State instructs the application where to redirect users after authentication is completed, and the value is typically a URL or URL path that takes users to a specific location within the application.

Now open a new incognito window and give the address of your osTicket Helpdesk.



This is how you will be logged in using SAML authentication. The success status can be seen on Azure AD by going on **Sign-in Logs** option as shown below.

Date	Request ID	User	Application	Status	IP address	Location	Conditional Acc...	Authentication
8/3/2022, 10:27:01 AM	44e71e9f-129d-4113...	Sakshi Kashyap	OsTicket_Skashyap	Success	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
8/3/2022, 10:26:59 AM	0a72a87e-ee80-4a6...	Sakshi Kashyap	OsTicket_Skashyap	Interrupted	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
8/3/2022, 9:45:09 AM	452d584d-90c2-450...	Sakshi Kashyap	OsTicket_Skashyap	Success	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
8/3/2022, 9:45:07 AM	e92b2611-e92c-48d...	Sakshi Kashyap	OsTicket_Skashyap	Interrupted	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:42:48 PM	5696a02d-e4f3-4063...	Sakshi Kashyap	OsTicket_Skashyap	Success	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:42:46 PM	6b2bb964-ce77-482...	Sakshi Kashyap	OsTicket_Skashyap	Interrupted	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:40:12 PM	5d679dbc-b380-454...	Sakshi Kashyap	OsTicket_Skashyap	Success	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:40:10 PM	00463aac-38d9-4ab...	Sakshi Kashyap	OsTicket_Skashyap	Interrupted	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:39:36 PM	02ada57e-fb4a-4dd...	Sakshi Kashyap	OsTicket_Skashyap	Success	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:38:12 PM	ca30010f-e873-45e2...	Sakshi Kashyap	OsTicket_Skashyap	Success	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au
7/30/2022, 7:38:10 PM	e7ad50d7-796b-4c2...	Sakshi Kashyap	OsTicket_Skashyap	Interrupted	65.1.142.227	Mumbai, Maharashtr...	Not Applied	Single-factor au