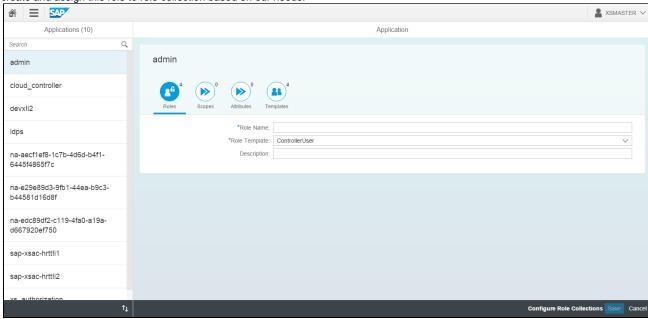
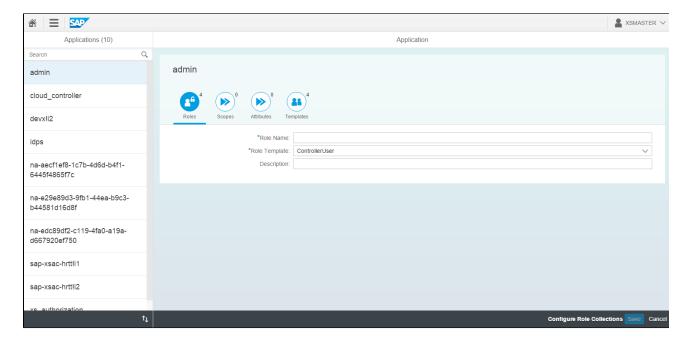
Application Role Builder

Introduction:

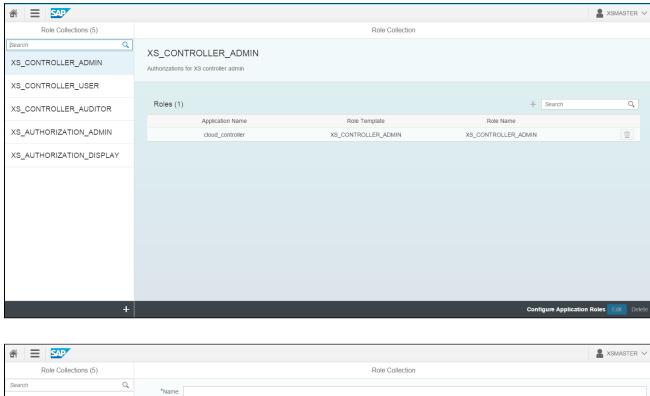
Application Role Builder is a XS Advanced Administration tool which allows the administrator to create and manage roles and role collections of applications deployed in XS advanced system. Application Role Builder includes following tools:

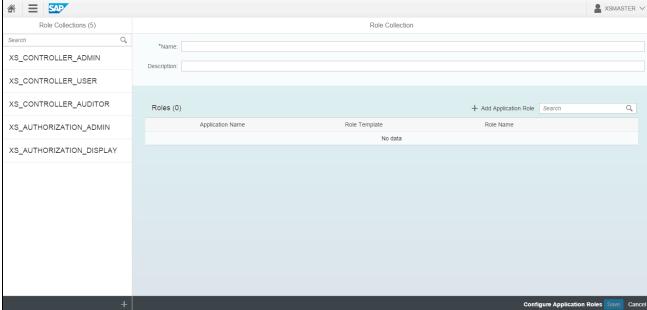
Application Role Builder: This tool is needed for creation, updation and deletion of a role. A role is an instance of role template; we can
create and assign this role to role collection based on our needs.





Role Collection Builder: This tool is needed for creation, updation and deletion of role collection. Predefined roles are assigned to role
collections which are, in turn assigned to SAP HANA users or SAML users.





Terminologies:

- Roles: A role is an instance of role template. Selecting a role template which suits users needs and privileges, assigning proper values to its attributes creates a role.
- Scopes: Scopes usually are defined in xs-security.json file of application deployed in XS Advanced systems. These are created by developers to define different set of authorizations in which an application can be accessed.
- Attributes: Attributes are also defined in xs-security.json of application deployed in XS Advanced systems. These values also put a check on authorization and further qualifies a role based on attribute values.
- Role Templates: It is defined in xs-security.json of application deployed, constituted from attributes and scopes. Role template
 is very similar to classes in object-oriented paradigm, which comes to life when instantiated as object. Similar to that, role is
 created from role template.
- Role Collections: It is created adding multiple, predefined roles which suits users authorizations and needs. A role collection can contain multiple roles from across different application, which simplifies the task of administrator to assign same set of roles again and again, if multiple users of same type exists.

Prerequisites :

To access Application Role Builder, the user should have one of the following role collections assigned to them:

1. XS_AUTHORIZATION_ADMIN: Full access, no restrictions.

2. XS_AUTHORIZATION_DISPLAY: Read-only access; cannot perform add, update and delete operations.

Actions Permitted:

Users can perform actions based on the role collections assigned to them. Following actions can be performed by user based on assigned role collections:

- a. XS_AUTHORIZATION_ADMIN: Users with this role collection can perform CRUD(create, read, update and delete) operations on available roles and role collections.
- a. XS_AUTHORIZATION_DISPLAY: Users with this role collection can perform only read operations.

APIs Used:

#	Operation	API Endpoint	Method
1	Read all the deployed applications	/sap/rest/authorization/apps	GET
2	Retrieve the application with provided application id	/sap/rest/authorization/apps/{appld}	GET
3	Read all role templates for the application	/sap/rest/authorization/apps/{appld}/roletemplates	GET
4	Retrieve a role template and its content scopes and attributes	/sap/rest/authorization/apps/{appld}/roletemplates/{templateName}	GET
5	Retrieve all application roles of the application	/sap/rest/authorization/apps/{appld}/roles	GET
6	Retrieve the application role and its content	/sap/rest/authorization/apps/{appld}/roletemplates/{templateName}/roles/{roleName}	GET
7	Create a new role based on role template	/sap/rest/authorization/apps/{appld}/roletemplates/{templateName}/roles/{roleName}	POST
8	Update an application role	/sap/rest/authorization/apps/{appld}/roletemplates/{templateName}/roles/{roleName}	PUT
9	Delete an application role	/sap/rest/authorization/apps/{appld}/roletemplates/{templateName}/roles/{roleName}	DELETE
10	Read all the role collections	/sap/rest/authorization/rolecollections	GET
11	Read a role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}	GET
12	Retrieves the application roles which are assigned to the role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}/roles	GET
13	Add a role to the role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}/roles	PUT
14	Remove an application role from the role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}/roles	DELETE
15	Create a role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}	POST
16	Change the description of a role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}	PUT
17	Delete a role collection	/sap/rest/authorization/rolecollections/{roleCollectionName}	DELETE