

Cora SeQUENCE Authentication Methods

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Starting with V10.0, Cora SeQUENCE has been renamed to Cora Orchestration.

V9.x and later

Overview

Authentication is the process used to verify the identity of a person, service, or device that wants to access data, resources, or applications. Authentication validates the identity and establishes a trust relationship for further interactions. There are several authentication methods, depending on network settings, operating system, and connection types.



Authentication scenarios

There are mainly three authentication scenarios.

- **Human to machine communication:** users need to provide credentials to access Cora SeQUENCE resources.
- **External services to Cora SeQUENCE:** external services or applications need to authenticate themselves to consume Cora SeQUENCE resources.
- **Cora SeQUENCE to external services:** Cora SeQUENCE needs to authenticate itself to consume external services.

Human to machine authentication

In this scenario, the authentication process can be configured to use username and password, or with single-sign on (SSO). Single sign-on (SSO) is an authentication process that allows a user to sign in once and access several applications.

Version	Protocols/methods	Description	SSO support
Earlier than 8.0	Windows Authentication	Process to prove the authenticity of a user or service attempting to access Windows.	 Kerberos and NTLM
Earlier than 8.0	WS-Federation	With this method, a Security Token Service (STS) in one trust domain provides authentication information to an STS in another trust domain when there is a trust relationship between the two domains. NOTE Support ended since V9.6	


























Version	Protocols/methods	Description	SSO support
8.5	SAML 2.0	XML-based protocol that uses security tokens containing assertions to pass information about a principal (usually an end user) between a SAML authority, named an Identity Provider, and a SAML consumer, named a Service Provider.	 SSO configuration supports SP and IDP-initiated Single Sign-On POST Binding flow.
8.6.2	OpenID Connect	Authentication layer on top of the OAuth 2.0 protocol. With OpenID Connect, clients verify the identity of end-users based on the authentication performed by an authorization server, and obtain basic profile information about the connecting end-user in an interoperable and REST-like manner.	 Authorization Code Flow only
Earlier than 8.0	Username/Password	Cora SeSequence built-in authentication method. -- only for unsecured development environment -- only for post installation procedures to configure Sequence users for example.	Non-SSO
Earlier than 8.0	Basic	Authentication scheme built onto the HTTP protocol. The client sends the user name and password as unencrypted base64 encoded text.	Non-SSO
Earlier than 8.0	Anonymous	Process that allows a user to log in to a website without credentials.	Non-SSO
Earlier than 8.0	Custom	Authentication methods configured to match specific customer or service requirements.	Non-SSO

External services to Cora SeSequence

Version	Protocol
Earlier than 8.0	Windows Authentication
8.7	OAuth 2.0 (bearer token in the authorization header)
Earlier than 8.0	Basic

Version	Protocol
Earlier than 8.0	Anonymous
Earlier than 8.0	Custom

Cora SeQuence to external services

Activity	Windows	OAUTH 2.0	User/pass.	Basic	Custom	On-behalf-of Flow
Azure Service Bus					 Shared Access Signature and Access Control Service	
ADSS		 (Azure AD)				
Database Listener					 Authentication is part of the specific database connection string.	
Email						
Email Listener						
HTTP Consumer						 V9.8.3 and later
REST Consumer						
WCF Consumer						
Web Service Consumer						
File Writer						

Activity	Windows	OAuth 2.0	User/pass.	Basic	Custom	On-behalf-of Flow
SAP RFC Consumer			✓			
CRM activities			✓			

NOTE

Unless indicated, the authentication protocol is supported since the release of the specific activity.

V8.6.2 and earlier

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