Configure ISE 3.2 Data Connect Integration with Splunk

Contents

Introduction **Prerequisites** Requirements **Components Used** Configure **Configurations** Step 1. Configure ISE Data Connect Settings 1. Enable Data Connect 2. Export Data Connect Certificate Step 2. Configure Splunk 1. Install Splunk DB Connect App 2. Install Oracle Drivers 3. Configure Splunk DB Connect App Identity 4. Configure Splunk DB Connect App Connection 5. Configure Splunk DB Connect Inputs Verify **Troubleshoot**

Introduction

This document describes how to configure Cisco Identity Services Engine (ISE) 3.2 integration with Splunk over Data Connect to retrieve reporting data from the ISE database directly. You can create your own queries and craft your own reports thanks to it.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- 1. Cisco ISE 3.2
- 2. Basic knowledge about Oracle queries
- 3. Splunk

Components Used

The information in this document is based on these software and hardware versions:

1. Cisco ISE 3.2

2. Splunk 9.0.0

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure

Configurations

Step 1. Configure ISE Data Connect Settings

1. Enable Data Connect

On ISE, navigate to Administration > System > Settings > Data Connectand toggle the button against Data Connect. Enter the password and click on Save.



Make a note of Data Connect settings, which include User Name, Hostname, Port, and Service Name. Data Connect by default is enabled on Secondary MNT in a distributed deployment, more information about failover scenarios can be found in the Administrator Guide.

Deployment	Licensing	Certificate	s Logging	Maintenance	Upgrade	Health Checks	Backup & Restore	Admin Access	Settings
Client Provisioning FIPS Mode Security Settings Alarm Settings General MDM / UEM S	iettings	Data Overv This featu or operati generate	Connect iew re provides read-only onal data about your insightful reports and	y ODBC access to th network depending dashboards.	ne ISE database on your busines	You can extract any s requirement and use	configuration e it to		
Posture	>	0							
Profiling			ODBC - JDBC		Endpoint Da	ta			
Protocols	>	Client	select * from endpoint_da	D	B System Aud	it			
Endpoint Scripts	>	Settin	as						
Proxy SMTP Server		To allow c	onnection to Cisco Is word.	SE Oracle Database,	enable the Dat	a Connect toggle butto	on and set a		
System Time			Data Connect						
API Settings			User Name	dataconnect					
Data Connect			Hostname/IP	ISE31-1ek.ise	e-cream.com				
Network Success Dia	gnostics >		Port Service Name	2484 cpm10					
DHCP & DNS Services	1		Password Expires o	n 10 October 2	022 at 09:01 U	rc			
Max Sessions Light Data Distribution Interactive Help Enable TAC Support C	ases		Change Password Password Confirm Password Password Expiry 90	View Password C	riteria				
						Reset	Save		

2. Export Data Connect Certificate

Operation in **Step 1**.triggered the creation of the Data Connect Certificate. It needs to be trusted by the clients who query ISE over Data Connect.

In order to export the certificate, navigate to Administration

> System > Settings > Cetificate Management > Trusted Certificates, Select Certificate with Data Connect Certificate Friendly Name and click on Export.

≡ Cisco ISE						Adr	ninistration · System
Deployment Licensing	Certificate	s Logging	Maintenance	Upgrade	Health Checks Ba	ckup & Restore Admin Acce	ess Settings
Certificate Management ~ System Certificates	Trus	ted Certif	icates A For dis	saster recovery it	is recommended to export and	backup all your trusted certificates.	
Trusted Certificates	/ Edit	+ Import 🟦 I	Export 👩 Delete	Q View			
OCSP Client Profile		Friendly Name		A Trusted Formatter Activity of Contract Structure Trusted Formatter Activity of Co	r Serial Number	Issued To	Issued By
Certificate Signing Requests							
Certificate Periodic Check Se		Data Connect		×			
		Data Connect Ce	rtificate	Cisco Ser	vices BF 3E 3E D3 F	. ISE_ORACLE_ISE31-1ek.ise-cre.	ISE_ORACLE_ISE31-1ek.i
Certificate Authority >							

The certificate is exported in PEM format.



Step 2. Configure Splunk

Note: Splunk installation is outside the scope of this document.

1. Install Splunk DB Connect App

Click on + Find More Apps from the main menu.



Enter Splunk DB Connect in the search menu and click on Installagainst Splunk DB Connect App as shown in the image.

spiunk>enterprise Apps •	
Browse More Apps	
Splunk DB Connect X	Best Match Newest Popular 924 Apps
CATEGORY IT Operations Security, Fraud & Compliance	DBX Splunk DB Connect Install
Business Analytics Utilities IoT & Industrial Data DevOps Directory Service Fmail	Splunk DB Connect version 2.x reached its End of Life on July 7, 2019. For more information about this change and our app lifecycle, see https://www.splunk.com/blog/2019/03/18/end-of-availability-splunk-built-apps-and- add-ons.html?April. Splunk DB Connect is a generic SQL database extension for Splunk that enables easy integration of database info More
Endpoint Firewall Generic	Category: Business Analytics, Utilities Author: Splunk Inc. Downloads: 152308 Released: 2 months ago Last Updated: 20 days ago View on Splunkbase

Enter Splunk credentials in order to install the App. Click on Agree and Install as shown in the image.

Login and Install

Enter your Splunk.com username and password to download the app.

•••••

Forgot your password?

The app, and any related dependency that will be installed, may be provided by Splunk and/or a third party and your right to use these app(s) is in accordance with the applicable license(s) provided by Splunk and/or the third-party licensor. Splunk is not responsible for any third-party app and does not provide any warranty or support. If you have any questions, complaints or claims with respect to an app, please contact the applicable licensor directly whose contact information can be found on the Splunkbase download page.

Splunk DB Connect is governed by the following license:

Splunk Software License Agreement

I have read the terms and conditons of the license(s) and agree to be bound by them. I also agree to Splunk's Website Terms of Use.

Cancel

Agree and Install

App Installation requires the restart, click on Restart Now.



2. Install Oracle Drivers

As per <u>Splunk Documentation</u>, JDBC drivers must be installed. Install the <u>Oracle driver</u> through the Splunk add-ons for DB Connect. Click on Login to Download as shown in the image.

	Splunk DBX Add-on for Oracle JDBC	
	0 rating	
	Splunk Cloud 🎽 Splunk Built	
	Overview Details	1,003
	JDBC driver for Oracle Database provides Oracle Database JDBC driver. Drivers can be use by others Splunk apps like DB Connect.	Downloads
	Release Notes	
	Version 2.1.0 March 1, 2022	VERSION 2.1.0 V
Cli	ck on Download.	

Splunk DBX Add-on for Oracle JDBC	
0 rating	
Splunk Cloud 🧭 Splunk Built	
Overview Details	1,003
JDBC driver for Oracle Database provides Oracle Database JDBC driver. Drivers can be use by others Splunk apps like DB Connect.	Downloads Download Rate this App
Release Notes	
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From the Home menu, click on the Gear icon next to Apps as shown in the image.