ISE 2.1 configureren met MS SQL met ODBC

Inhoud

Inleiding Voorwaarden Vereisten Gebruikte componenten Configureren Stap 1: MS SQL-basisconfiguratie Stap 2. ISE-basisconfiguratie Stap 3. Gebruikersverificatie configureren Stap 4. groepsvernieuwing instellen Stap 5. Eigenschappen opnieuw instellen Problemen oplossen

Inleiding

Dit document beschrijft hoe u Identity Services Engine (ISE) kunt configureren met de Microsoft Standard Query Language (SQL) Server voor ISE-verificatie met Open Database Connectivity (ODBC)

Opmerking: Voor Open Database Connectivity (ODBC)-verificatie moet ISE een eenvoudig wachtwoord voor tekstgebruikers kunnen genereren. Het wachtwoord kan in de database worden versleuteld, maar moet worden gedecrypteerd door de **opgeslagen procedure**.

Voorwaarden

Vereisten

Cisco raadt kennis van de volgende onderwerpen aan:

- Database- en ODBC-concepten
- Microsoft SQL-server

Gebruikte componenten

De informatie in dit document is gebaseerd op de volgende software- en hardware-versies:

- Identity Services Engine 2.1
- MSSQL Server 2008 R2

Configureren

Stap 1: MS SQL-basisconfiguratie

De stappen van de configuratie omvatten het creëren van een gegevensbank en één gebruiker voor ISE met permissies om tot die gegevensbank te toegang.

Opmerking: ISE ondersteunt alleen SQL-verificatie, niet de Windows-account. Als u de verificatiemodus moet wijzigen, raadpleegt u de <u>Wijze van serververificatie wijzigen</u>

1. Open SQL Server Management Studio (**Start menu > Microsoft SQL Server 2008 R2**) en maak een database:

Kicrosoft SQL Serv	er Management Studio		
File Edit View De	bug Tools Window C	Community	Help
🗄 🔔 New Query 🛛 🛅 🗎	📸 📸 🔛 📑 🖬	- 6 🕰	Ŧ
Object Explorer	→ ₱	×	
Connect 🕶 📑 📑	T 🛃 🌆		
 Iocalhost (SQL Se Databases 	rver 10.50.1600 - BABALAN	D\ad	
🗆 🧰 Sys	New Database		
± 1	Attach		
E	Restore Database		
🕀 📴 Dat	Restore Files and Filegroup	os	
⊕ Security ⊕ Server	Start PowerShell		
🕀 🧰 Replicat	Reports	+	
	Refresh		

2. Laat standaardopties los of pas databases aan zoals in deze afbeelding:

🚪 New Database							_ 🗆 ×
Select a page	🔄 Script 👻 📑 H	lelp					
General							
Filegroups	Database name:		ISEDB				
	Owner:		<default></default>			_	
	_		,				
	Use full-text in	ndexing					
	Database files:						
	Logical Name	File Type	Filegroup	Initial	Autogrowth		Path
	ISEDB	Rows Data	PRIMARY	2	By 1 MB, unrestricted gro		C:\Program Files\Microsoft SQL Server\MS
	ISEDB_log	Log	Not Appli	1	By 10 percent, unrestrict		C:\Program Files\Microsoft SQL Server\MS
Connection							
Server:							
localhost							
Connection: BABALAND\administrator							
view connection properties							
Progress							
db. Beek							F
Ready	<u> </u>					_	
- 4 D.							Add Remove
							OK Cancel

3. Maak een gebruiker en stel rechten in zoals in de onderstaande afbeeldingen wordt getoond:



🚪 Login - New			
Select a page	<u>S</u> Script 👻 📑 Help		
General			Conroh
User Mapping	Login name.	ISEDBOSEF	Search
Securables	O Windows authentication		
	SQL Server authentication		
	Password:	••••	
	Confirm password:	•••••	
	Specify old password		
	Old password:		
	Enforce password policy	/	
	Enforce password expira	ation	
	🗖 User must change pass	word at next login	
	O Mapped to certificate		
	O Mapped to asymmetric key		
	Map to Credential		Add
Connection	Mapped Credentials	Credential Provider	
Server: localhost			
Connection: BABALAND\administrator			
View connection properties			
Progress			Remove
Ready	Default database:	ISEDB	
The start of	Defectibleseuroes	<default></default>	
	Delaukianguage:		
		ОК	Cancel

Login Properties - ISEDBUse	٢			
Select a page	🕄 Script 👻	📑 Help		
General				
Server Roles	Users map	ped to this login:		
Serverblas	Man	Database	User	Default Schema
Status		ISEDB	ISEDBUser	
		master	1020000	
		model		
		msdb		
		temodh		
		tompub		
	Guest	account enabled for: ISEDB		
	Database	role membership for: ISEDB		
Connection	<mark> db_ac</mark>	cessadmin		
Server:	db_ba	ckupoperator		
localhost	<mark>⊘ db_</mark> da	tareader		
Connection:	db_da	tawriter Iadacia		
BABALAND\administrator		iadmin revdatareador		
		nyualaieauei nydatawriter		
View connection properties	db_ow	ner		
	db se	curityadmin		
Progress	 public			
Ready				
- 10 Jan				
				OK Cancel

Stap 2. ISE-basisconfiguratie

Maak een ODBC Identity Source bij Administration > Externe Identity Source > ODBC en testverbinding:

ODBC List > ISE_ODBC

ODBC Identity Source	e Connection	tored Procedures Attributes Groups
ODBC DB connection de	etails	
* Hostname/IP[:port]	bast-ad-ca.cisco.con	
* Database name	ISEDB	
Admin username	ISEDBUser	
Admin password	•••••	
* Timeout	5	Test connection
* Retries	1	Connection succeeded
* Database type	Microsoft SQL Serv	Stored Procedures
	Test Connection	Plain text password authentication - Not Configured
		Plain text password fetching - Not Configured
		Check username or machine exists - Not Configured
		Fetch groups - Not Configured
		Fetch attributes - Not Configured
		Close

Stap 3. Gebruikersverificatie configureren

ISE-verificatie naar ODBC gebruikt opgeslagen procedures.De opgeslagen procedure voor de authenticatie **resultaten** met deze syntax:

Waarde	Туре
Resultaat	integrator
Groep (alleen voor compatibiliteit met ACS 4.2)	Integer of varchar(255)
Accountinformatie	varchar(255)
Fout-string	varchar(255)

Raadpleeg voor andere procedures de <u>beheerdershandleiding voor Cisco Identity Services Engine</u> 2.1

Tip: Het is mogelijk om genoemde parameters terug te geven in plaats van de resultaatset. Het is gewoon een ander type output, functionaliteit is hetzelfde.

1. Navigeren in naar opties en uit de **machine** halen **om** wijziging **in opslagruimte voor tabellen opnieuw genereren** (optioneel):

Options	? ×
 Environment General Fonts and Colors Keyboard Help Text Editor Query Execution Query Results SQL Server Object Explorer Designers Table and Database Designers Maintenance Plans Analysis Services Designers Source Control 	Table Options Image: Override connection string time-out value for table designer updates: Transaction time-out after: 30 seconds Auto generate change scripts Warn on null primary keys Warn about difference detection Warn about tables affected Prevent saving changes that require table re-creation Diagram Options Default table view: Column Names Image: Launch add table dialog on new diagram
	OK Cancel

2. Maak de tabel. Stel de instellingen voor de identiteit in op de **primaire toets**. Als u **user_id** als **primaire sleutel** wilt instellen, klikt u met de rechtermuisknop op de **kolom naam**:

	SQLQuery2.sqlistrator	(52))* BAST-AD	-CA.ISdbo.IS	_Users*		+)
	Column Name	Data Type	Allow Nulls			
▶8	user_id	int				
	username	varchar(MAX)				
	password	varchar(MAX)				
C	olumn Properties					
[<mark></mark>					
[∃ Full-text Specification				No	
	Has Non-SQL Server Sub	scriber			No	
[Identity Specification				Yes	_
	(Is Identity)				Yes	1
	Identity Increment				1	
	Identity Seed				1	

Laatste SQL:

CREATE TABLE [dbo].[ISE_Users]([user_id] [int] IDENTITY(1,1) NOT NULL, [username] [varchar](max) NOT NULL, [password] [varchar](max) NOT NULL, CONSTRAINT [PK_ISE_Users] PRIMARY KEY CLUSTERED

```
(
[user_id] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS =
ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]
```

3. Start deze query om één gebruiker in te voegen:

```
insert into ISE_Users(username,password) values('odbcuser1','odbcpass');
```

```
4. Maak een procedure voor eenvoudige tekstwachtwoordverificatie (gebruikt voor PAP, EAP-GTC binnenmethode, TACACS):
```

```
CREATE PROCEDURE [dbo].[ISEAuthUserPlainReturnsRecordset]
@username varchar(255), @password varchar(255)
AS
BEGIN
IF EXISTS( SELECT username
FROM ISE_Users
WHERE username = @username
AND password = @password )
SELECT 0,11,'This is a very good user, give him all access','No Error'
FROM ISE_Users
WHERE username = @username
ELSE
SELECT 3,0,'odbc','ODBC Authen Error'
END
```

5. Maak een procedure voor het opvragen van een gewoon tekstwachtwoord (gebruikt voor CHAP, MSCHAPv1/v2, EAP-MD5, LEAP, EAP-MSCHAPv2 binnenmethode, TACACS):

```
CREATE PROCEDURE [dbo].[ISEFetchPasswordReturnsRecordset]

@username varchar(255)

AS

BEGIN

IF EXISTS( SELECT username

FROM ISE_Users

WHERE username = @username)

SELECT 0,11, 'This is a very good user, give him all access', 'No Error', password

FROM ISE_Users

WHERE username = @username

ELSE

SELECT 3,0, 'odbc', 'ODBC Authen Error'

END
```

6. Er bestaat een procedure voor controle van de gebruikersnaam of -machine (gebruikt voor MAB, snelle heraansluiting van PEAP, EAP-FAST en EAP-TTLS):

BEGIN IF EXISTS(SELECT username FROM ISE_Users WHERE username = @username) SELECT 0,11,'This is a very good user, give him all access','No Error' FROM ISE_Users WHERE username = @username ELSE SELECT 3,0,'odbc','ODBC Authen Error' END

7. Testprocedures:



Series a page Series Series Ser	🐙 Execute Procedure - [dbo].[ISEAuthUserPlainR	eturnsRecordset]		
Personal Pe	Select a page	🔄 Script 👻 📑 Hel	p			
Parameter Data Type Output Planmeter Pass Null Value adouter1 @usename varchar(25) No odbopase] edbopase] @password varchar(25) No odbopase] odbopase] Sever: coanted odbopase] odbopase] Sever: oanted Connection: B&BALAND Value visuante Sever: obadout OK Cencel OK Cencel OVectorset Sever: obadout obadout obadout obadout obadout obadout obadout obadout obadout <	🚰 General					
Connection epassword varchar(255) No odccsel epassword varchar(255) No odccsel epassword varchar(255) No odccsel Server: occurrection: BABALAND Safministrator BABALAND Safministrator Mex connection properties Progress OK Cancel Operstand: OK Cancel Querytsal-Limitator SQUerytsal-Limitator v Progress OK Cancel OCLABE SQUerytsal-Limitator (57)) BATADCALEdo. SELDers v ISE (ISEDD) OC OC OC OCLABE Statut Section (52)* BASTADCALEdo. SELDers v ISE (ISEDD) OC OC OC OCLABE Statut Section (52)* Bastrator (52)* Statut Section (52)* v Statut Section (52)* Statut Section (52)* Statut Section (52)* Statut Section (52)* OC OCLABE Statut Section (52)* Statit Cf. Statut Section (52)*<		Parameter	Data Type	Output Parameter	Pass Null Value	Value
Connection Sever: Se		Qusemame	varchar(255)	No		odbcuser1
Connection Server: icochost Correction: BABALNAD valueministrator Wexconnection properties Yources Progress Progress Connection properties Progress Progress Connection properties Progress Connection properties Progress Connection properties Progress Connection properties Progress Connection properties Connection propertie		epassword	varcnar(200)	INO		oubcpass
Onnection Server: localinal Connection: BABALAND'administrator Wew connection properties *rogress						
Connection Server: localinest Connection Server: localinest Connection BABALAND'administrator Progress						
Connection Server: icoalist Connection: BABALAND administrator BABALAND administrator BABALAND administrator Wew connection properties if Wew connection properties if We column name) (No column name) (No column name) if We column name) (No column name) (No column name) if We column name) (No column name) (No column name)						
Connection Server: locahoat Connection Server: locahoat Connection: BABALAND'administrator Wew connection properties Progress Ready Co Ready C Cancel C Cancel C						
Connection Server: localinod Server: localinod Server: localinod Server: localinod Server: localinod Server: localinod Server: BABALAND'administrator Progress Progre						
Connection Server: localhost Connection: BABALANDVadministrator Y Vew connection properties Yourcess OK Cancel OK Cancel OK Cancel OK Cancel OK Cancel SetUp: SetU						
Connection Server: localhost Connection: BABALAND/administrator BABALAND/administrator BABALAND/administrator Wew connection properties Progress Co Ready C Cancel OK Cancel OK Cancel OK Cancel SELECT 'Recturn_value int SELECT 'Recturn_value = [dbo].[ISEAuthUserPlainEcturnsRecordset] (Vertur_value = [dbo].[ISEAuthUserPlainEcturnsRecordset] SELECT 'Recturn_value = @return_value GO PECLARE @return_value = @return_value GO						
Connection Server: blocathost Connection BABALANDNadministrator BABALANDNadministrator Mexess Progress						
Connection Server: localhost Connection: Server: localhost Connection: Progress Prog						
Connection Server: localhost Cornection: BABALAND administrator Market Connection properties Progress Connection properties Progress Connection properties Progress Connection properties Connection						
Server: localhost Connection: BRALAND/administrator Wew connection properties Progress Commention properties Progress Commention properties Progress Commention properties Progress Commention properties Progress Commention properties Progress Commention properties Commention properties Commention properties Commention properties Commention properties Commention properties Second Second Commention properties Commention properties C	Connection					
localhost Connection: BABALAND'administrator	Server:					
Connection: BABALAND'administrator BABALAND'administrator Progress	localhost					
Image: State of the commanded of the comman	Connection: BABALAND\administrator					
Progress Progress Ready OK Cancel OK Cancel OK Cancel OK Cancel OK Cancel DSE [ISEDB] GO DECLARE @return_value int EXEC @return_value int EXEC @return_value = [dbo][ISEAuthUserPlainReturnsRecordset] @username = N'odbouser1', @password = N'odbouser1', @password = N'odbouser1', @gassword = N'odbouser1',	View connection properties					
Progress						
OK Cancel OK Cancel OQQuery5.sqlinistrator (57)) BAST-AD-CA.ISdoo.ISE_Users SQLQuery2.sqlistrator (52))* BAST-AD-CA.ISdoo.ISE_Users DSE [ISEDB] GO O DECLARE @return_value int EXEC @return_value = [dbo][ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser!', @password = N'odbcuses!', @password = N'odbcuses!', SELECT 'Return Value' = @return_value GO IResults	Progress					
OK Cancel SQLQuery5.sqlinistrator (57)) BAST-AD-CA.ISdoo.ISE_Users SQLQuery2.sqlistrator (52))* BAST-AD-CA.ISdoo.ISE_Users DECLARE @return_value int EXEC @return_value = [dbo]. [ISEAuthUserPlainReturnsRecordset] @username = N'odbcusser1', @password = N'odbcusser1', @gassword = N'odbcusser1', @password = @return_value GO	Ready					
OK Cancel SQLQuery5.sqlinistrator (57)) BAST-AD-CA.ISdbo.ISE_Users SQLQuery2.sqlistrator (52))* BAST-AD-CA.ISdbo.ISE_Users Image: SQLQuery2.sqlistrator (52))* SQLQuery2.sql	No. of					
OK Cancel GQUQuery5.sqlinistrator (57)) BAST-AD-CA.ISdbo.ISE_Users \$QUQuery2.sqlistrator (52))* BAST-AD-CA.ISdbo.ISE_Users GO DECLARE @return_value int EXEC @return_value = [dbol.,[ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser1', @password = N'odbcuser1', @password = N'odbcuser1', @password = @return_value GO		1				
SQLQuery5.sqlinistrator (57)) BAST-AD-CA.ISdbo.ISE_Users SQLQuery2.sqlistrator (52))* BAST-AD-CA.ISdbo.ISE_Users USE [ISEDB] GO DECLARE @return_value int EXEC @return_value = [dbo][ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser1', @password = N'odbcuser1', @password = N'odbcusers' SELECT 'Return Value' = @return_value GO I Results Messages (No column name)					OK	Cancel
SQLQuery5.sqlinistrator (57)) BAST-AD-CA.ISdbo.ISE_Users SQLQuery2.sqlistrator (52))* BAST-AD-CA.ISdbo.ISE_Users USE [ISEDB] GO DECLARE @return_value [Messages] Messages (No column name) (No column name) (No column name) (No column name) (No column name) (No column name) (No column name) (No column name) No Error						
USE [ISEDB] GO DECLARE @return_value int EXEC @return_value = [dbo].[ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser1', @password = N'odbcpass' SELECT 'Return Value' = @return_value GO Results D_Messages (No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error	SQLQuery5.sqlinistrator (57)) B/	AST-AD-CA.ISdbo.ISE_U	Isers SQLQuery2.sc	ılistrator (52))* 🛛 B	AST-AD-CA.ISdbo.IS	E_Users 🗸 👻
<pre>DECLARE @return_value int EXEC @return_value = [dbo][ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser1', @password = N'odbcpass' SELECT 'Return Value' = @return_value GO Results Messages (No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error</pre>	USE [ISEDB] GO					
<pre>DECLARE @return_value int EXEC @return_value = [dbo][ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser1', @password = N'odbcpass' SELECT 'Return Value' = @return_value GO GO Results Messages (No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error</pre>						
EXEC @return_value = [dbol. [ISEAuthUserPlainReturnsRecordset] @username = N'odbcuser1', @password = N'odbcpass' SELECT 'Return Value' = @return_value GO	DECLARE Greturn_value in	τ				
Go SELECT 'Return Value' = @return_value GO Results Messages (No column name) (No column name) (No column name) (No column name) No Error	EXEC @return_value =	[dbo].[ISEAuthUs	erPlainReturnsH	Recordset]		
SELECT 'Return Value' = @return_value GO Results Messages (No column name) (No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error	- @password = N'od	bcpass'				
GO GO GO Results Messages No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error	SELECT 'Return Value' =	@return value				
I Results Messages (No column name) (No column name) 0 11 This is a very good user, give him all access No Error		_				
Results Image: Messages (No column name) (No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error	60					
Results Messages (No column name) (No column name) 0 11 This is a very good user, give him all access No Error						
Results Messages (No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error						
(No column name) (No column name) (No column name) 0 11 This is a very good user, give him all access No Error	Results Messages					
	(No column name) (No column nam	e) (No column name) This is a very cood ur	ser, give him all access	(No column name)		
		This is a very good us	sor, give him all access			

Andere procedures op dezelfde manier testen.

8. Procedures op ISE configureren en opslaan:

Stored Procedures	Attributes	Groups
Returns recordset	-	
ISEAuthUserPlainReturnsReco	ordset	\oplus
ISEFetchPasswordReturnsRed	cordset	\oplus
ISEUserLookupReturnsRecord	dset	\oplus
s	<i>i</i>	\oplus
s	i	\oplus
at xx-xx-xx-xx-xx	• ()	
	Stored Procedures Returns recordset ISEAuthUserPlainReturnsRecord ISEFetchPasswordReturnsRecord ISEUserLookupReturnsRecord s int xx-xx-xx-xx-xx	Stored Procedures Attributes Returns recordset ISEAuthUserPlainReturnsRecordset ISEFetchPasswordReturnsRecordset ISEUserLookupReturnsRecordset s t xx-xx-xx-xx-xx

9. Maak een eenvoudige authenticatieregel met ODBC en test deze:

v	Auti	hent	ication Policy				
		~	MAB	: If Wired_MAB OR A Wireless_MAB :use Internal Endpoints	Allow Protocols : Default Network Access	and	Edit 🕶
		~	Dot1X Default 	: If Wired_802.1X OR A Wireless_802.1X :use All_User_ID_Stores	Allow Protocols : Default Network Access	and	Edit 🕶
	ø		test_aaa ✓ Default	: If Radius:Service-Type EQUALS Login A	Allow Protocols : Default Network Access	and	Edit 🕶

b3560#test aaa group ISE236 odbcuser1 odbcpass legacy Attempting authentication test to server-group ISE236 using radius User was successfully authenticated.

Event	5200 Authentication succeeded	
Jsername	odbcuser1	
Endpoint Id		
Endpoint Profile		
Authentication Policy	Default >> test_aaa >> Default	
Authorization Policy	Default >> Default	
Authorization Result	PermitAccess	
Authorization Result	PermitAccess	
Authorization Result	PermitAccess 2016-06-08 11:04:07.004	
Authorization Result thentication Details Source Timestamp Received Timestamp	PermitAccess 2016-06-08 11:04:07.004 2016-06-08 11:04:07.005	
Authorization Result Ithentication Details Source Timestamp Received Timestamp Policy Server	PermitAccess 2016-06-08 11:04:07.004 2016-06-08 11:04:07.005 bise236	
Authorization Result Ithentication Details Source Timestamp Received Timestamp Policy Server Event	PermitAccess 2016-06-08 11:04:07.004 2016-06-08 11:04:07.005 bise236 5200 Authentication succeeded	

11001	Received RADIUS Access-Request
11017	RADIUS created a new session
11117	Generated a new session ID for a 3rd party NAD
15049	Evaluating Policy Group
15008	Evaluating Service Selection Policy
15048	Queried PIP - Radius.NAS-Port-Type
15048	Queried PIP - Normalised Radius.RadiusFlowType (4 times)
15048	Queried PIP - Radius.Service-Type
15004	Matched rule - test_aaa
15041	Evaluating Identity Policy
15006	Matched Default Rule
15013	Selected Identity Source - ISE_ODBC
24852	Perform plain text password authentication in external ODBC database - ISE_ODBC
24849	Connecting to external ODBC database - ISE_ODBC
24850	Successfully connected to external ODBC database - ISE_ODBC
24855	Expect external ODBC database stored procedure to return results in a recordset - ISE_ODBC
22037	Authentication Passed
15036	Evaluating Authorization Policy
15048	Queried PIP - Radius.User-Name
15048	Queried PIP - Network Access.UseCase
15048	Queried PIP - Normalised Radius.RadiusFlowType (5 times)
15004	Matched rule - Default

Steps

Stap 4. groepsvernieuwing instellen

1. Maak tabellen met gebruikersgroepen en een andere die voor veel-naar-veel-mapping wordt gebruikt:

```
CREATE TABLE [dbo].[Groups](
[Group_ID] [int] IDENTITY(1,1) NOT NULL,
[Group_Name] [varchar] (max) NOT NULL,
[Group_Desc] [text] NOT NULL,
CONSTRAINT [PK_Groups] PRIMARY KEY CLUSTERED
(
[Group_ID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS =
ON, ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY] TEXTIMAGE_ON [PRIMAR
CREATE TABLE [dbo].[User_Groups_Mapping](
[user_id] [int] NOT NULL,
[group_id] [int] NOT NULL
) ON [PRIMARY]
ALTER TABLE dbo.User_Groups_Mapping ADD CONSTRAINT
FK_User_Groups_Mapping_Groups FOREIGN KEY
(
group_id
) REFERENCES dbo.Groups
(
Group_ID
) ON UPDATE CASCADE
ON DELETE CASCADE
GO
ALTER TABLE dbo.User_Groups_Mapping ADD CONSTRAINT
FK_User_Groups_Mapping_ISE_Users FOREIGN KEY
(
```

user_id
) REFERENCES dbo.ISE_Users
(
user_id
) ON UPDATE CASCADE
ON DELETE CASCADE

2. Voeg groepen en afbeeldingen toe, zodat ODBCUSER1 tot beide groepen behoort:

```
INSERT [dbo].[Groups] ([Group_ID], [Group_Name], [Group_Desc]) VALUES (1, N'ODBCGroup1', N'My
Nice Group1')
INSERT [dbo].[User_Groups_Mapping] ([user_id], [group_id]) VALUES (1, 1)
INSERT [dbo].[Groups] ([Group_ID], [Group_Name], [Group_Desc]) VALUES (2, N'ODBCGroup2', N'My
Nice Group2')
INSERT [dbo].[User_Groups_Mapping] ([user_id], [group_id]) VALUES (1, 2)
```

3. Procedure voor groepsherkenning maken:

```
CREATE PROCEDURE [dbo].[ISEGroupsRetrieval]
@username varchar(255), @result int output
AS
BEGIN
if exists (select * from ISE_Users where username = @username)
begin
set @result = 0
select Group_Name from Groups where group_id in (select group_ID from User_Groups_Mapping where
User_Groups_Mapping.USER_ID IN (select USER_ID from ISE_Users where username=@username ) )
end
else
set @result = 1
END
```

4. Geef de kaart op aan technische groepen:

ODBC List > ISE_ODBC

ODBC Identity Source

General	Connection	Stored Procedures	Attributes	Groups
Ste	ored procedure type	Returns recordset	Ψ	
Plain text pass	word authentication	ISEAuthUserPlainReturnsRec	ordset	\oplus
Plain tex	t password fetching	ISEFetchPasswordReturnsRe	cordset	\oplus
Check usernam	e or machine exists	ISEUserLookupReturnsRecor	dset	\oplus
	Fetch groups	ISEGroupsRetrieval	(i)	Ð
	Fetch attributes	ISEAttrsRetrieval	(i)	\oplus
Search for M	AC Address in format	xx-xx-xx-xx-xx	• (i)	

5. Selecteer de groepen en voeg ze toe aan de ODBC-identiteitsbron:

ODBC List > ISE_ODB	C				
ODBC Identity So	ource				
General	Connection	Stored Procedures Attribute	5 Groups		
/ Edit 🕂 Add 👻	🗙 Delete				
Name		Name in ISE			
		No	data available		
		Select Groups from ODBC			х
		Sample User or Machine odbo	cor1	Retrieve Groups	
				() [Redieve Gloups	
		Name Name in IS	E		
		ODBCGroup1 ODBCGrou	.p1		
		ODBCGroup2 ODBCGrou	p2		
				ОК	Cancel

6. Voeg een andere gebruiker toe die niet tot een groep behoort:

insert into ISE_Users(username,password) values('odbcuser2','odbcpass');
7. Maak een specifieke beleidsset en test:

Policy Sets Profiling Posture Client Provisioning	ng			
Policy Sets Search policy names & descriptions.	Define the Policy Sets by configuring rules For Policy Export go to Administration > Set	based on conditions. Drag and drop sets ystem > Backup & Restore > Policy Export	in the left hand side to change the order. Page	
+- B ↑ ↓ X @=	Status Name	Description	Conditions	
Summary of Policies	TestAAA		Radius:Service-Type EQUALS Login	Edit
A list of all your policies	 Authentication Policy 			
Global Exceptions Rules across entire deployment	Default Rule (If no match)	: Allow Protocols : Default Network	Access and use : ISE_ODBC	Edit 🕶
Z TestAAA				
🛛 🔽 VPN	 Authorization Policy 			
🔽 Default	Exceptions (0)			
Default Policy Set	Standard			
Save Order Reset Order				
	Status Rule Name	Conditions (identity groups and	other conditions) Permissions	
	Group1Access	If ISE_ODBC:ExternalGroups EQI ODBCGroup1	JALS then PermitAccess	Edit 🕶
	Default	if no matches, then DenyAccess		Edit 🕶

b3560#test aaa group ISE236 odbcuser2 odbcpass legacy Attempting authentication test to server-group ISE236 using radius User authentication request was rejected by server.

```
b3560#test aaa group ISE236 odbcuser1 odbcpass legacy
Attempting authentication test to server-group ISE236 using radius
User was successfully authenticated.
```

AuthorizationPolicyMatchedRule	Group1Access
CPMSessionID	0a3027eci0HeVTM3/bn5vLXkWMcJ0em5rzUDaOSnbMmAvL7jcfY
ISEPolicySetName	TestAAA
AllowedProtocolMatchedRule	Default
IdentitySelectionMatchedRule	Default
Network Device Profile	Cisco
Location	Location#All Locations
Device Type	Device Type#All Device Types
ExternalGroups	ODBCGroup1
ExternalGroups	ODBCGroup2
RADIUS Username	odbcuser1

Stap 5. Eigenschappen opnieuw instellen

1. Om dit voorbeeld te vereenvoudigen, wordt een vlakke tabel gebruikt voor eigenschappen:

```
CREATE TABLE [dbo].[User_Attributes](
[user_id] [int] NOT NULL,
[Attribute_Name] [varchar](max) NOT NULL,
[Attribute_Value] [varchar](max) NOT NULL
) ON [PRIMARY]
```

GO

ALTER TABLE [dbo].[User_Attributes] WITH CHECK ADD CONSTRAINT [FK_User_Attributes_ISE_Users] FOREIGN KEY([user_id]) REFERENCES [dbo].[ISE_Users] ([user_id]) ON UPDATE CASCADE ON DELETE CASCADE GO

2. Maak een eigenschap voor een van de gebruikers:

INSERT [dbo].[User_Attributes] ([user_id], [Attribute_Name], [Attribute_Value]) VALUES (2, N'AwsomenessLevel', N'100') INSERT [dbo].[User_Attributes] ([user_id], [Attribute_Name], [Attribute_Value]) VALUES (2, N'UserType', N'admin')

3. Bewaarde procedure maken:

CREATE PROCEDURE [dbo].[ISEAttrsRetrieval] @username varchar(255), @result int output AS BEGIN if exists (select * from ISE_Users where username = @username) begin

```
set @result = 0
select attribute_name , attribute_value from user_attributes where USER_ID in(SELECT USER_ID
from ISE_Users where username = @username)
end
else
set @result = 1
END
```

4. Stel de eigenschap in op de wikkel:

ODBC List > ISE_ODBC

ODBC Identity Source

General	Connection	Stored Procedures	Attributes	Groups
Sto	red procedure type	Returns recordset	*	
Plain text pass	word authentication	ISEAuthUserPlainReturnsRec	cordset	\oplus
Plain text	t password fetching	ISEFetchPasswordReturnsRe	cordset	\oplus
Check username	e or machine exists	ISEUserLookupReturnsRecor	rdset	\oplus
	Fetch groups	ISEGroupsRetrieval	<i>i</i>	\oplus
	Fetch attributes	ISEAttrsRetrieval	i	\oplus
Search for MA	C Address in format	xx-xx-xx-xx-xx-xx	• (i)	

5. Tekenen van de eigenschappen:

Select Attributes from ODBC						
Sample User or Machine	odbcuser2		Retrieve Attributes			
Name	Туре 🔺	Default Value	Name in ISE			
AwsomenessLevel	STRING	100	AwsomenessLevel			
UserType	STRING	admin	UserType			



6. Pas ISE-regels aan:

	Status	s Rule Name Group1Access	if	Conditions (i ISE_ODBC:E ODBCGroup	dentity grou ExternalGrou 1	ps and other conditions) then	Permissions PermitAcces	S			Edit 🕶
		AwesomeUser		ISE_ODBC:	wsomenes	sLevel EQUALS 100		PermitAcces	S			Edit 🕶
		Default	if no	o matches, th	en Deny	Access						Edit 🕶
SRe	fresh	Reset Repeat Counts	💆 Export To ▾							. ·		Ţ Filter ◄
	Time		Status	Details	Repeat	Identity	Endpoint	: ID	Endpoint Pr	Authenticat	Authorization Policy	Authorizatio
×			\$			Identity	Endpoint	ID	Endpoint Profi	Authenticatior	Authorization Policy	Authorization
	Jun 08, 2	2016 12:21:45.596 PM		ò		odbcuser2				TestAAA >>	TestAAA >> AwesomeUser	PermitAccess

Problemen oplossen

Als de verbinding niet succesvol is, controleer het logbestand van de evenement Windows. Op ISE gebruik **tonen** de opdracht **de logingapplicatie pre-management.log tail** tijdens pogingen om verbinding te maken.

Voorbeeld van slechte authenticatiemodus:

```
bise236/admin# sh logg app prrt-management.log tail
2016-06-08 09:03:59,822 WARN [admin-http-pool177][]
cisco.cpm.odbcidstore.impl.MSSQLServerDbAccess -: bastien: -- Connection to ODBC DB failed.
Exception: com.microsoft.sqlserver.jdbc.S
QLServerException: Login failed for user 'babaland\administrator'. ClientConnectionId:c74ade15-
4f34-415a-9a94-4c54c58c0fc3
com.microsoft.sqlserver.jdbc.SQLServerException: Login failed for user 'babaland\administrator'.
ClientConnectionId:c74ade15-4f34-415a-9a94-4c54c58c0fc3
at
com.microsoft.sqlserver.jdbc.SQLServerException.makeFromDatabaseError(SQLServerException.java:21
6)
at com.microsoft.sqlserver.jdbc.TDSTokenHandler.onEOF(tdsparser.java:254)
at com.microsoft.sqlserver.jdbc.TDSParser.parse(tdsparser.java:84)
at com.microsoft.sqlserver.jdbc.SQLServerConnection.sendLogon(SQLServerConnection.java:2908)
at com.microsoft.sqlserver.jdbc.SQLServerConnection.logon(SQLServerConnection.java:2234)
at com.microsoft.sqlserver.jdbc.SQLServerConnection.access$000(SQLServerConnection.java:41)
at
com.microsoft.sqlserver.jdbc.SQLServerConnection$LogonCommand.doExecute(SQLServerConnection.java
:2220)
at com.microsoft.sqlserver.jdbc.TDSCommand.execute(IOBuffer.java:5696)
at
com.microsoft.sqlserver.jdbc.SQLServerConnection.executeCommand(SQLServerConnection.java:1715)
at com.microsoft.sqlserver.jdbc.SQLServerConnection.connectHelper(SQLServerConnection.java:1326)
```

🛃 Event Viewer						
File Action View Help						
🗢 🔿 🔀 🖬 🛛 🖬						
Event Viewer (Local)	Event Viewer (Local) Application Number of events: 29,048 (1) New events available					
Custom Views	Lavel	Data and Time	Sauras	Fuent ID	Task Catagory	
E Windows Logs	Level	C (0 (2016 11:00:07 AM	Source	Event ID	Task Category	
Application	Information	6/8/2016 11:08:07 AM	MSSQLSERVER	19456	Logon	
E Security	Information	6/8/2016 11:03:30 AM	MSSQLSERVER MSSQLSERVER	18456	Logon	
Sustem	Information	6/8/2016 11:03:33 AM	MSSQLSERVER	5094	Server	
Enrwarded Events	Information	6/8/2016 11:02:23 AM	MSSQLSERVER MSSQLSERVER	5084	Server	
Applications and Services Logs	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Active Directory Web Services	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
DFS Replication	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Directory Service	Information	6/8/2016 11:02:23 AM	MSSOL SER VER	5084	Server	
🛃 DNS Server	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
🛃 Hardware Events	Information	6/8/2016 11:02:23 AM	MSSOL SER VER	5084	Server	
👔 Internet Explorer	Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
Key Management Service		6/8/2016 11:02:23 AM	MSSOL SERVER	5084	Server	
Microsoft	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
E Windows		6/8/2016 11:02:23 AM	MSSOL SER VER	5084	Server	
🛨 🔜 API-Tracing	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
🛨 🔜 Appilo		6/8/2016 11:02:23 AM	MSSOL SERVER	5084	Server	
	(i) Information	6/8/2016 11:02:23 AM	MSSOI SERVER	5084	Server	
Application Experience	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
E Audio	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
Authentication User Interface	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
🕀 🧰 Bits-Client	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
🗄 🧮 CAPI2	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
🕀 🧮 CertificateServicesClient-Creden	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
🕀 🚞 CertPolEng	Information	6/8/2016 11:02:23 AM	MSSOI SEDVED	5084	Server	-
🗉 🧮 CodeIntegrity	Event 18456 MSSOLSE	RVER				×
CorruptedFileRecovery-Client						
CorruptedFileRecovery-Server	General Details					
DateTimeControlPanel						1
DeviceSync	Login failed for use	r 'babaland\administrator'. Reason: An attem	nt to login using SQL authentication f	ailed. Server is configured for	Windows	
Dhan Nan Enforcement Client	authentication only	/. [CLIENT: 10.48.39.236]				
Drcp-tvap-enforcement-client Drcp-server		•				

Voorbeeld van door gebruikers ontbrekende rechten om database te openen:

```
2016-06-08 09:13:57,842 WARN [admin-http-pool159][]
cisco.cpm.odbcidstore.impl.MSSQLServerDbAccess -:bastien::- Connection to ODBC DB failed.
Exception: com.microsoft.sqlserver.jdbc.SQLServerException: Cannot open database "ISEDB"
requested by the login. The login failed. ClientConnectionId:299c2956-6946-4282-b3ca-
2aa86642a821
com.microsoft.sqlserver.jdbc.SQLServerException: Cannot open database "ISEDB" requested by the
login. The login failed. ClientConnectionId:299c2956-6946-4282-b3ca-2aa86642a821
at
com.microsoft.sqlserver.jdbc.SQLServerException.makeFromDatabaseError(SQLServerException.java:21
6)
at com.microsoft.sqlserver.jdbc.TDSTokenHandler.onEOF(tdsparser.java:254)
at com.microsoft.sqlserver.jdbc.SQLServerConnection.sendLogon(SQLServerConnection.java:2908)
at com.microsoft.sqlserver.jdbc.SQLServerConnection.logon(SQLServerConnection.java:2234)
```

at com.microsoft.sqlserver.jdbc.SQLServerConnection.access\$000(SQLServerConnection.java:41)

🛃 Event Viewer					
File Action View Help					
🗢 🔿 🔁 🗔 🔽 🗊					
🛃 Event Viewer (Local)	Application Number of	events: 29,048 (!) New events available			Ac
Gypt Custom Views			1-		
🖃 📑 Windows Logs	Level	Date and Time	Source	Event ID Task Category	
Application	Information	6/8/2016 11:13:56 AM	MSSQLSERVER	18456 Logon	
ecurity	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	3408 Server	
Setup	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	9688 Server	
System	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	9666 Server	
Forwarded Events	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	9666 Server	
Applications and Services Logs	(1) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
Active Directory web Services	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17126 Server	1 T
DFS Replication	(1) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26059 Server	
Directory Service	(1) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26059 Server	DW
E DNS Server	(1) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17201 Server	
Internet Evelorer	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
Kov Management Service	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	26048 Server	
E Windows	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	26048 Server	
T API-Tracing	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
Application Server-Applications	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	17136 Server	2
Application-Experience	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	26013 Server	
🕀 🧰 AppLocker	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	Ev
🕀 🧮 Audio	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
🕀 🧮 Authentication User Interface	 Information 	6/8/2016 11:13:21 AM	MSSQLSERVER	17663 Server	
🕀 📫 Bits-Client	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
🕀 🚞 CAPI2	(i) Information	6/8/2016 11:13:20 AM	MSSQLSERVER	958 Server	
🕀 🚞 CertificateServicesClient-Creden	(i) Information	6/8/2016 11:13:20 AM	MSSQLSERVER	17137 Server	
🕀 🧮 CertPolEng	Information	6/8/2016 11:13:20 AM	MSSOLSED//ED	19030 Server	
🕀 🛄 CodeIntegrity	Event 18456 MSSOLSER	/FR			x
CorruptedFileRecovery-Client					- 2
CorruptedFileRecovery-Server	General Details				
DateTimeControlPanel	(1
DeviceSync	Login failed for user	'ISEDRI Iser' Reason: Failed to open the evolu	citly specified database. [CLIENT: 10.48	20 2261	
🗄 🛄 Dhcp-Client	Login talled for user	account interson railed to open the expli	enty specified database [CEI2N1: 10.40		
Dhcp-Nap-Enforcement-Client					
+ DHCP-Server					

Om de DB-bewerkingen te kunnen oplossen, stelt u logcomponenten **odbc-id-Store** in op DEBUGniveau onder **Beheer > Systeem > Vastlegging > Loggen > Configuratie debug Log**.

Logs worden geplaatst in het bestand Port-Management.log.

Voorbeeld voor buser2:

```
2016-06-08 12:26:56,009 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC
ID Store Operation: Authenticate Plain Text Password. Username=odbcuser2,
SessionID=0a3027ecLA_rJLKsS5QAzuRvluGWzdYe67rIgcG3MMQcpE8yKnw
2016-06-08 12:26:56,012 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write
customer log message: 24852
2016-06-08 12:26:56,012 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -
:::- OdbcConnectionPool - get connection
2016-06-08 12:26:56,012 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -
:::- OdbcConnectionPool - use existing connection
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -
:::- OdbcConnectionPool - connections in use: 1
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Authenticate plain text password
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Prepare stored procedure call, procname=ISEAuthUserPlainReturnsRecordset
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Using recordset to obtain stored procedure result values
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write
customer log message: 24855
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Text: {call ISEAuthUserPlainReturnsRecordset(?, ?)}
2016-06-08 12:26:56,013 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Setup stored procedure input parameters, username=odbcuser2, password=***
2016-06-08 12:26:56,014 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Execute stored procedure call
2016-06-08 12:26:56,017 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
```

Process stored procedure results 2016-06-08 12:26:56,017 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Obtain stored procedure results from recordset 2016-06-08 12:26:56,017 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Received result recordset, number of columns=4 2016-06-08 12:26:56,017 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Results successfully parsed from recordset 2016-06-08 12:26:56,018 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::- OdbcConnectionPool - release connection 2016-06-08 12:26:56,018 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::- OdbcConnectionPool - connections in use: 0 2016-06-08 12:26:56,018 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- Call to ODBC DB succeeded 2016-06-08 12:26:56,018 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcAuthResult -:::-Authentication result: code=0, Conection succeeded=false, odbcDbErrorString=No Error, odbcStoredProcedureCustomerErrorString=null, accountInfo=This is a very good user, give him all access, group=11 2016-06-08 12:26:56,019 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write customer log message: 24853 2016-06-08 12:26:56,026 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Get all user groups. Username=odbcuser2, SessionID=0a3027ecLA_rJLKsS5QAzuRvluGWzdYe67rIgcG3MMQcpE8yKnw 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Fetch user groups. Username=odbcuser2, SessionID=0a3027ecLA_rJLKsS5QAzuRvluGWzdYe67rIgcG3MMQcpE8yKnw 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write customer log message: 24869 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - get connection 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - use existing connection 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - connections in use: 1 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Fetch user groups 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Prepare stored procedure call, procname=ISEGroupsRetrieval 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Text: {call ISEGroupsRetrieval(?,?)} 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Setup stored procedure input parameters, username=odbcuser2 2016-06-08 12:26:56,029 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Execute stored procedure call 2016-06-08 12:26:56,031 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Process stored procedure results 2016-06-08 12:26:56,032 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Received epmty result set, no groups/attributes data can be obtained 2016-06-08 12:26:56,032 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Result code indicates success 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - release connection 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - connections in use: 0 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- Call to ODBC DB succeeded 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write customer log message: 24870 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Get all user groups. Got groups... 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Get all user groups. Username=odbcuser2, ExternalGroups=[] 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Fetch user attributes. Username=odbcuser2, SessionID=0a3027ecLA_rJLKsS5QAzuRvluGWzdYe67rIgcG3MMQcpE8yKnw

2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write customer log message: 24872 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - get connection 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - use existing connection 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - connections in use: 1 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Fetch user attributes 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Prepare stored procedure call, procname=ISEAttrsRetrieval 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Text: {call ISEAttrsRetrieval(?,?)} 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Setup stored procedure input parameters, username=odbcuser2 2016-06-08 12:26:56,033 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Execute stored procedure call 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Process stored procedure results 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Received result recordset, total number of columns=2 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-According to column number expect multiple rows (vertical attributes/groups retured result) 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Fetched data: AwsomenessLevel=100 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Fetched data: UserType=admin 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Results successfully parsed from recordset 2016-06-08 12:26:56,035 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-Result code indicates success 2016-06-08 12:26:56,036 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - release connection 2016-06-08 12:26:56,036 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcConnectionPool -:::-OdbcConnectionPool - connections in use: 0 2016-06-08 12:26:56,036 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- Call to ODBC DB succeeded 2016-06-08 12:26:56,036 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.CustomerLog -:::- Write customer log message: 24873 2016-06-08 12:26:56,036 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Get all user attrs. Username=odbcuser2, Setting ISE_ODBC.AwsomenessLevel to 100 2016-06-08 12:26:56,036 DEBUG [Thread-84][] cisco.cpm.odbcidstore.impl.OdbcIdStore -:::- ODBC ID Store Operation: Get all user attrs. Username=odbcuser2, Setting ISE_ODBC.UserType to admin