Configurar o 2.1 ISE com MS SQL usando o ODBC

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Introdução

Este original descreve como configurar o Identity Services Engine (ISE) com o server padrão do idioma de consulta de Microsoft (SQL) para a autenticação ISE usando a conectividade de bases de dados aberto (ODBC)

Nota: A autenticação da conectividade de bases de dados aberto (ODBC) exige o ISE poder buscar uma senha do usuário do texto simples. A senha pode ser cifrada no base de dados, mas tem que ser decifrada pelo **procedimento armazenado**.

Pré-requisitos

Requisitos

A Cisco recomenda que você tenha conhecimento destes tópicos:

- Base de dados e conceitos ODBC
- Microsoft SQL server

Componentes Utilizados

As informações neste documento são baseadas nestas versões de software e hardware:

- 2.1 do Identity Services Engine
- Server 2008 R2 MSSQL

Configurar

Etapa 1. Configuração básica MS SQL

As etapas de configuração incluem a criação de um base de dados e de um usuário para o ISE com as permissões alcançar esse base de dados.

Nota: O ISE apoia somente a autenticação SQL, não a conta de Windows. Se você precisa de mudar o modo de autenticação, refira por favor o modo da autenticação de servidor da mudança

1. Abra o estúdio do Gerenciamento do servidor SQL (**menu de início > Microsoft SQL server** 2008 R2) e crie um base de dados:



2. Deixe opções padrão ou ajuste configurações de base de dados segundo as indicações desta imagem:

🚪 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						
Maw connection proportion						
Progress						
dia Paadu						
Theody .	<u>, , , , , , , , , , , , , , , , , , , </u>					
410						Add Remove
						OK Cancel

3. Crie um usuário e ajuste permissões segundo as indicações das imagens abaixo:



🚪 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	r			
Select a page	🛒 Script 👻	📑 Help		
General				
Server Roles	Users map	ped to this login:		
Securables	Мар	Database	User	Default Schema
🚰 Status		ISEDB	ISEDBUser	
		master		
		model		
		msdb		
		tempdb		
	Guest	account enabled for: ISEDB		
	Database	role membership for: ISEDB		
Connection	db_ac	cessadmin		
Server:	l∐ do_pa	ckupoperator tareader		
localhost	db_da	tawriter		
Connection:	db_dd	ladmin		
BABALAND \administrator	db_de	nydatareader		
View connection properties	db_de	nydatawriter		
	db_ow	/ner		
Progress	Dublic	cuntyadmin		
All Beady	E base			
neauy				
, el la.				
				OK Cancel

Etapa 2. Configuração básica ISE

Crie uma fonte da identidade ODBC na administração > fonte externo da identidade > ODBC e conexão de teste:

ODBC List > ISE_ODBC

General	e Connection	Stored Procedures	Attributes	Groups
ODBC DB connection de	etails			
* Hostname/IP[:port]	bast-ad-ca.cisco.con	1		
* Database name	ISEDB			
Admin username	ISEDBUser	<i>i</i>		
Admin password	•••••			
* Timeout	5	Test connection		×
* Retries	1	Connection succeed	ded	^
* Database type	Microsoft SQL Serv	Stored Procedures		
	Test Connection	Plain text password	authentication - No	t Configured
		Plain text password	fetching - Not Conf	igured
		Check username or	machine exists - N	ot Configured
		Fetch groups - Not (Configured	
		Fetch attributes - No	ot Configured	
				Close

Etapa 3. Configurar a autenticação de usuário

A autenticação ISE ao ODBC usa procedimentos armazenados. O procedimento armazenado para a autenticação retorna o **resultset** com esta sintaxe:

Valor	Тіро
Resultado	Inteiro
Grupo (para a compatibilidade com ACS 4.2 somente)	Inteiro ou varchar(255)
Informação de conta	varchar(255)
Série de erro	varchar(255)

Para outros procedimentos, refira o <u>Guia de Administração do 2.1 do Cisco Identity Services</u> <u>Engine</u>

Dica: É possível retornar parâmetros Nomeados em vez do resultset. É apenas um tipo diferente de saída, funcionalidade é o mesmo.

1. Navegue às opções e uncheck **impedem salvar a mudança que exigem a** caixa de verificação da **recreação da tabela** (opcional):

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. Crie a tabela. Certifique-se que você ajustou os ajustes da identidade no **chave principal**. Para ajustar o **user_id** como o **chave principal**, direito - clique o **nome de coluna**:

	SQLQuery2.sqlistrator	(52))* BAST-AD	-CA.ISdbo.IS	_Users*		+ 3
	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	

SQL final:

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. Execute esta pergunta para introduzir um usuário:

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

```
4. Crie um procedimento para a autenticação de senha do texto simples (usada para o método interno PAP, EAP-GTC, 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. Crie um procedimento para a busca da senha do texto simples (usada para a RACHADURA, MSCHAPv1/v2, EAP-MD5, PULO, método interno do EAP-MSCHAPv2, 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
```

 Crie um procedimento para o username da verificação ou a máquina existe (usado para o MAB, rápido reconecte do PEAP, EAP-FAST e do 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. Teste procedimentos criados:



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] Provertion: BABLARN Value Antion (Str) BAT-AD-CALSdo.ISE (Deters) SQLOBER/2.edmethod (Str) BAT-AD-CALSdo.ISE (Deters) Varchardon (Str) BAT-AD-CALSdo.ISE (Deters) Provertion (Str) BAT-AD-CALSdo.ISE (Deters) SQLOBER/2.ed	🚰 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.ISE_Uses v ISE (ISEDD) OC OC OC OCLABE Status SQUerytsal-Limitator (52)* BASTADCALEdo.ISE_Uses v Status Saftadocale SQUerytsal-Limitator (52)* BASTADCALEdo.ISE_Uses v OCLABE Secture_value [Documents]* SQUerytsal* v Status Status Secture_value Secture_value Go OC O O Secture_value Secture_value Go Status Secture_value Secture_value Secture		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
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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						
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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						
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Connection: BABALAND'administrator BABALAND'administrator Progress	localhost					
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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					
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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					
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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 🗸 👻
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<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				
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(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			

Teste outros procedimentos da mesma forma.

8. Configurar procedimentos no ISE e salvar:

ODI	BC List > ISE_OD	DBC				
OD	BC Identity S	ource				
	General	Connection	Stored Procedures	Attributes	G	iroups
	Sto	ored procedure type	Returns recordset	•		
	Plain text pass	word authentication	ISEAuthUserPlainReturnsReco	ordset	\oplus	
	Plain text	t password fetching	ISEFetchPasswordReturnsRed	cordset	\oplus	
	Check username	e or machine exists	ISEUserLookupReturnsRecord	dset	\oplus	
		Fetch groups		i	Ð	
		Fetch attributes		i	\oplus	
	Search for MA	C Address in format	xx-xx-xx-xx-xx	• (i)		

9. Crie uma regra da autenticação simples usando o ODBC e teste-a:

•	Aut	hent	tication Policy				
		~	MAB	: If Wired_MAB OR Wireless_MAB	Allow Protocols : Default Network Access	and	Edit 🕶
			Default	use Internal Endpoints			
-		~	Dot1X	: If Wired_802.1X OR Wireless_802.1X	Allow Protocols : Default Network Access	and	Edit 🕶
			Default	:use All_User_ID_Stores			
	ø		test_aaa	: If Radius:Service-Type EQUALS Login	Allow Protocols : Default Network Access	and	Edit 🕶
			Default	use ISE_ODBC			

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	
Username	odbcuser1	
Endpoint Id		
Endpoint Profile		
Authentication Policy	Default >> test_aaa >> Default	
Authorization Policy	Default >> Default	
Authorization Result	PermitAccess	
Authorization Result	PermitAccess	
Authorization Result Ithentication Details Source Timestamp	PermitAccess 2016-06-08 11:04:07.004	
Authorization Result Ithentication 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 uthentication 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

Etapa 4. Configurar a recuperação do grupo

1. Crie as tabelas que contêm grupos de usuário e as outras usadas para muito-à-muitos o mapeamento:

```
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. Adicionar grupos e mapeamentos, de modo que ODBCUSER1 pertença a ambos os grupos:

```
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. Crie o procedimento da recuperação do grupo:

```
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. Trace-o para buscar grupos:

ODBC List > ISE_ODBC

ODBC Identity Source

General	Connection	Stored Procedures	Attributes	Groups
Sto	pred procedure type	Returns recordset	-	
Plain text pass	word authentication	ISEAuthUserPlainReturnsRec	cordset	\oplus
Plain tex	t password fetching	ISEFetchPasswordReturnsRe	ecordset	\oplus
Check usernam	e or machine exists	ISEUserLookupReturnsRecor	rdset	\oplus
	Fetch groups	ISEGroupsRetrieval	i	Ð
	Fetch attributes	ISEAttrsRetrieval	(1)	\oplus
Search for MA	AC Address in format	xx-xx-xx-xx-xx	• (j)	

5. Busque os grupos e adicionar-los na fonte da identidade ODBC:

ODBC List > ISE_ODBC				
ODBC Identity Source				
General Connecti	ion Stored Procedures	Attributes Groups		
/ Edit 🕂 Add 👻 🗙 Delete				
Name	Name in ISE			
		No data available		
	Select Groups from	DDBC		х
	Sample User or Machir	odbcuser1	(i) Retrieve Groups	
	Name	Name in ISE		
	✓ ODBCGroup1	ODBCGroup1		
	✓ ODBCGroup2	ODBCGroup2		
			OK	Cancol
			UK	Cancel

6. Adicionar um outro usuário que não pertença a qualquer grupo:

insert into ISE_Users(username,password) values('odbcuser2','odbcpass');
7. Crie o grupo específico da política e teste-o:

Policy Sets Profiling Posture Client Provi	visioning	
Policy Sets Search policy names & descriptions.	Define the Policy Sets by configuring rules based on conditions. Drag and drop sets on the left hand side to change the order. For Policy Export go to Administration > System > Backup & Restore > Policy Export Page	
+ - Pa- ↑ ↓ X @	Status Name Description Conditions	Edit
Summary of Policies	IestAAA Radius:Service-Type EQUALS Login	Luit
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		
Save Order	Status Rule Name Conditions (identity groups and other conditions) Permissions	
	Group1Access if ISE_ODBC:ExternalGroups EQUALS then PermitAccess ODBCGroup1	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

Etapa 5. Configurar a recuperação dos atributos

1. A fim simplificar este exemplo, uma tabela lisa é usada para atributos:

```
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. Crie um atributo para um dos usuários:
```

```
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. Crie o procedimento armazenado:

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. Trace-o para buscar atributos:

ODBC List > ISE_ODBC

ODBC Identity Source

General	Connection	Stored Procedures	Attributes	Groups
	Stored procedure type	Returns recordset	•	
Plain text pa	assword authentication	ISEAuthUserPlainReturnsRec	ordset	\oplus
Plain	text password fetching	ISEFetchPasswordReturnsRe	cordset	\oplus
Check usern	ame or machine exists	ISEUserLookupReturnsRecor	dset	\oplus
	Estable success			
	Fetch groups	ISEGroupsRetrieval	(1)	\odot
	Fetch attributes	ISEAttrsRetrieval	i	\oplus
Search for	MAC Address in format	xx-xx-xx-xx-xx-xx	• (i)	

5. Busque os atributos:

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



6. Ajuste regras ISE:

	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

Troubleshooting

Se a conexão não é bem sucedida, log de eventos dos indicadores de verificação. No ISE use a **cauda de prrt-management.log do aplicativo do** comando show logging ao tentar conectar.

Exemplo do modo da autenticação inválida:

```
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)
\texttt{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)	Application Number o	fevents: 29,048 (!) New events available				
Custom Views	Lavel	Data and Time	Courses	Event ID	Task Catagory	
Windows Logs	i Information	6/9/2016 11:09:07 AM	Source MSCOLSERVER	22000	Fask Category	
Application	Information	6/8/2016 11:08:07 AM	MSSQLSERVER	19456	Logon	
E Security	Information	6/8/2016 11:03:39 AM	MISSOLISERVER	18456	Logon	
System	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Eorwarded Events	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Applications and Services Logs	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Active Directory Web Services	(i) Information	6/8/2016 11:02:23 AM	MSSOL SERVER	5084	Server	
DFS Replication	Information	6/8/2016 11:02:23 AM	MSSOL SERVER	5084	Server	
Directory Service	(i) Information	6/8/2016 11:02:23 AM	MSSOL SERVER	5084	Server	
🛃 DNS Server	(1) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
🗎 Hardware Events	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
👔 Internet Explorer	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
Key Management Service	(i) Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
	(i) Information	6/8/2016 11:02:23 AM	MSSOLSERVER	5084	Server	
API Tracing	(i) Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
	(i) Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Apple A	(1) Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Application-Experience	(i) Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
AppLocker	 Information 	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
🕀 🧮 Audio	 Information 	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
🗉 📔 Authentication User Interface	 Information 	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
🕀 🚞 Bits-Client	 Information 	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
E CAPI2	(i) Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
CertificateServicesClient-Creden	 Information 	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
CertPolEng	Information	6/8/2016 11:02:23 AM	MSSOL SERVIER	5084	Server	
CodeIntegrity	Event 18456, MSSQLSEF	RVER				×
DateTimeControlPanel	General Details					
DeviceSync						
Dhcp-Client	Login failed for use	r 'babaland\administrator'. Reason: An attem	pt to login using SQL authentication fa	iled. Server is configured for	Windows	
Dhcp-Nap-Enforcement-Client	authentication only	/. [CLIENT: 10.48.39.236]				
THE DHCP-Server						

Exemplo de permissões faltantes do usuário abrir o base de dados:

```
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.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)

🛃 Event Viewer					
File Action View Help					
🗢 🔿 🔁 🖬 🔽 🖬					
🛃 Event Viewer (Local)	Application Number of	events: 29,048 (!) New events available			Ac
Generation Views	[I mult	Data and True	Courses	Event ID Tech Coloren	
Windows Logs	Level	C (2/2016 11/12/EC AM	Source	Event ID Task Category	
Application	Information	6/8/2016 11:13:56 AM	MSSQLSER VER	18456 Logon	
Security	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	3408 Server	- III 🐄
Setup	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	9688 Server	
System	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	9666 Server	<u> </u>
	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17187 Server	
Active Directory Web Services	Tafamation	6/8/2016 11:13:21 AM	MSSQLSERVER	1713/ Server	
DES Replication	Tafamation	6/8/2016 11:13:21 AM	MSSQLSERVER	1/126 Server	
Directory Service	Tafamation	6/8/2016 11:13:21 AM	MSSQLSERVER	26059 Server	
DNS Server		6/8/2016 11:13:21 AM	MSSQLSERVER	26059 Server	
Hardware Events		6/8/2016 11:13:21 AM	MSSQLSERVER	1/201 Server	
🛃 Internet Explorer	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
Key Management Service	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
🖃 🧮 Microsoft	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26048 Server	
🖃 🛄 Windows	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26048 Server	
🕀 📫 API-Tracing	Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	G
🕀 🧰 AppID	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	
Application-Experience	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26013 Server	Ev
AppLocker	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
🛨 🛄 Audio	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
Authentication User Interface	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17663 Server	1
Bits-Client	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
E CAPI2	1 Information	6/8/2016 11:13:20 AM	MSSQLSERVER	958 Server	
CertificateServicesClient-Creden	Information	6/8/2016 11:13:20 AM	MSSQLSERVER	17137 Server	-116
🖃 🔛 CertPolEng	Information	6/8/2016 11:13:20 AM	MSSOLSED//ED	19030 Server	1 18
	Event 18456, MSSQLSER	VER		×	• • •
					2
Contrupted FileRecovery-Server	General Details				
Decreosync	Login failed for user	'ISEDBUser'. Reason: Failed to open the expli	icitly specified database. [CLIENT: 10.48.	39.236]	
Dhop-Nan-Enforcement-Client					
I ■ DHCP-Server					

A fim pesquisar defeitos operações DB, permita a ODBC-identificação-**loja de** registro dos componentes DE DEBUGAR o nível sob a **administração > o sistema > registrando > debugam a configuração do log**.

Os logs são colocados no arquivo de prrt-management.log.

Exemplo para odbuser2:

```
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_rJLKsS5QAzuRvluGWzdYe67rIqcG3MMQcpE8yKnw 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