

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

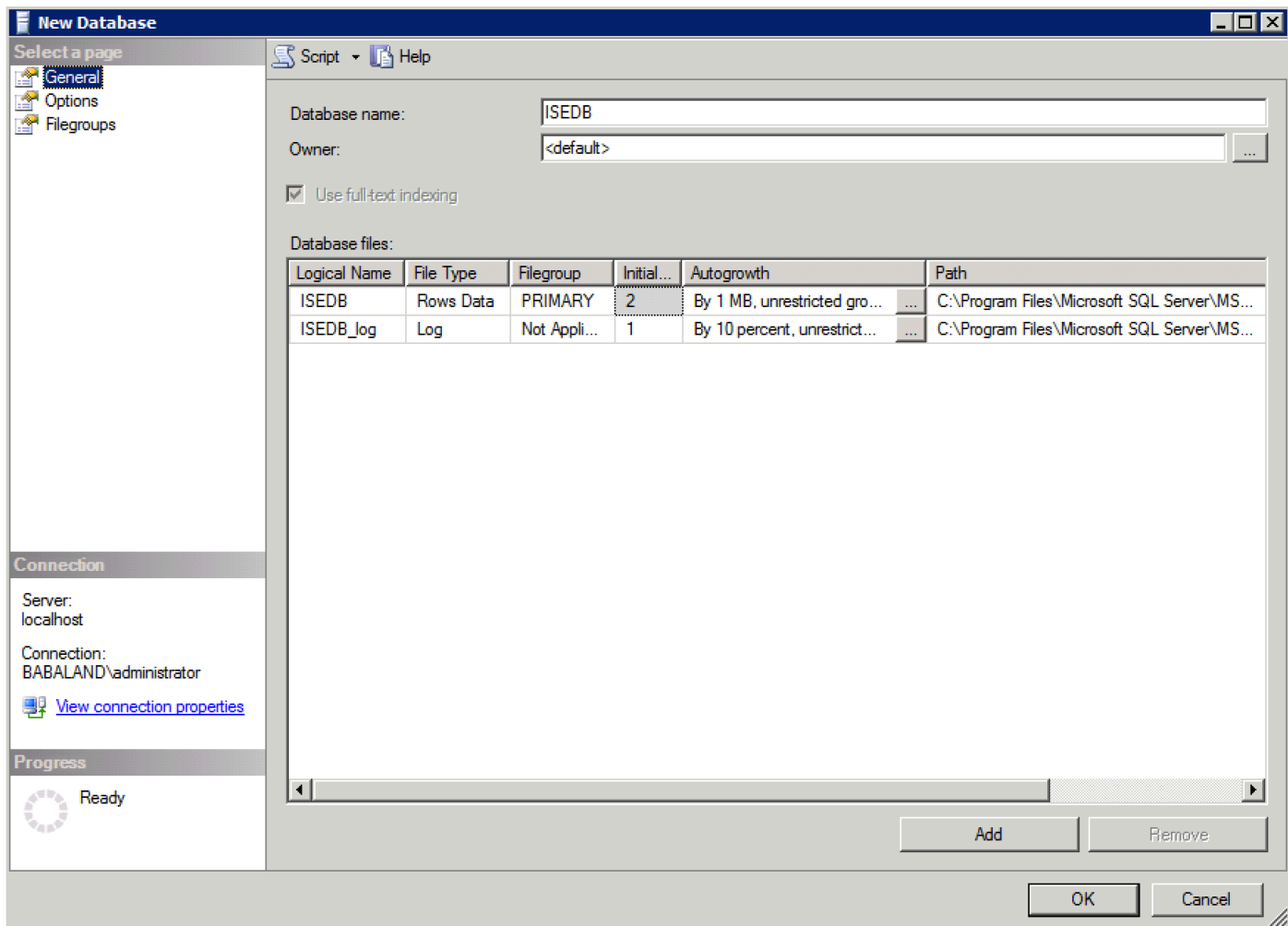
A Cisco recomenda que você tenha conhecimento destes tópicos:

- 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



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

Microsoft SQL Server Management Studio

File Edit View Debug Tools Window Community



Object Explorer



- [-] localhost (SQL Server 10.50.1600 - BABALAND\ad...)
 - + Databases
 - [-] Security
 - [-] Logins
 - [New Login...]
 - Filter
 - Start PowerShell
 - Reports
 - Refresh
 - + Servers
 - + Credentials

New Login...

Filter

Start PowerShell

Reports

Refresh

Login - New [Minimize] [Maximize] [Close]

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Login name: Search...

Windows authentication

SQL Server authentication

Password:

Confirm password:

Specify old password

Old password:

Enforce password policy

Enforce password expiration

User must change password at next login

Mapped to certificate

Mapped to asymmetric key

Map to Credential Add

Mapped Credentials

Credential	Provider

Remove

Default database:

Default language:

OK Cancel

Connection

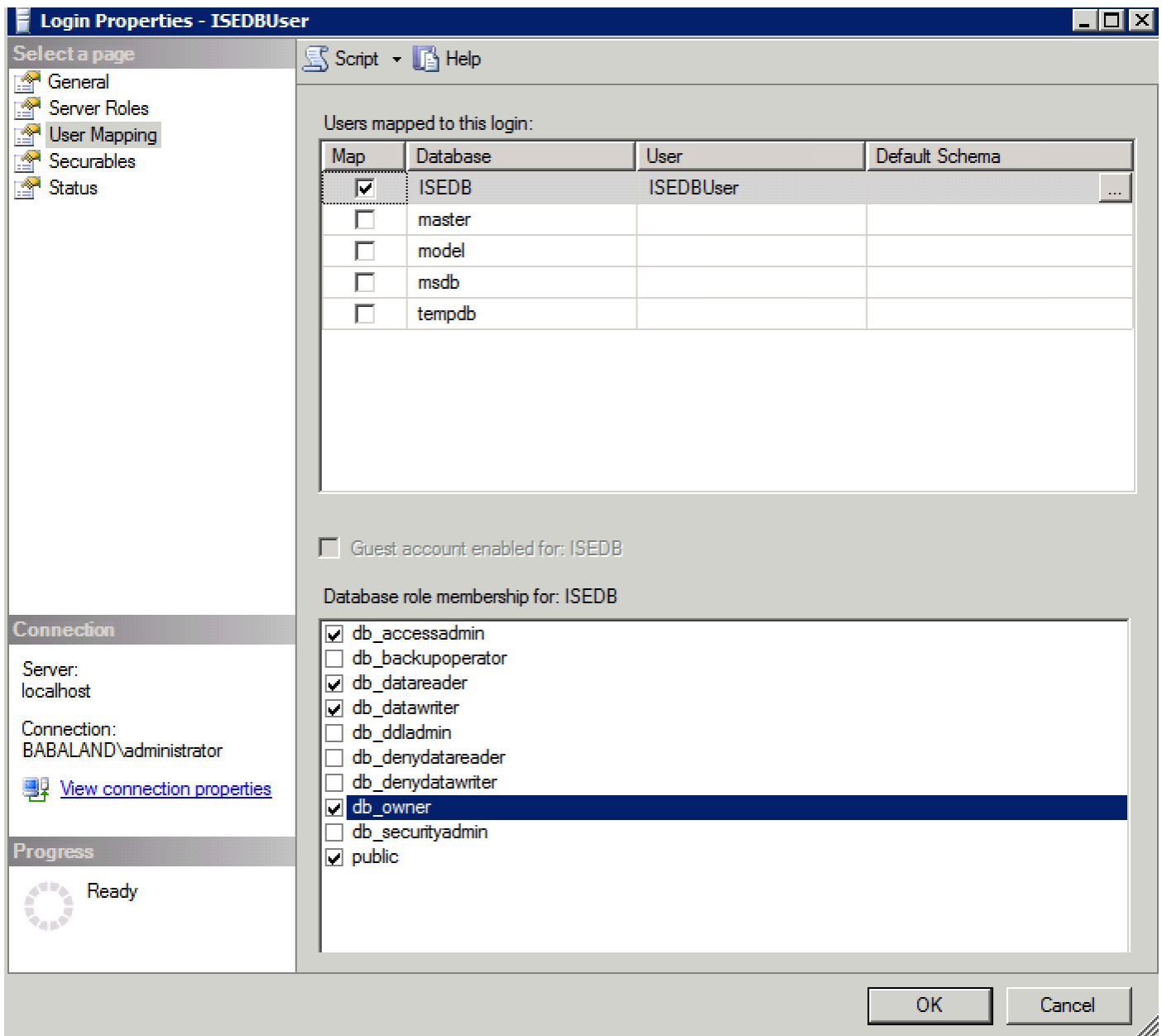
Server: localhost

Connection: BABALAND\administrator

[View connection properties](#)

Progress

Ready



Etapa 2. Configuração básica ISE

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

ODBC Identity Source

General

Connection

Stored Procedures

Attributes

Groups

ODBC DB connection details

* Hostname/IP[:port] * Database name Admin username ⓘAdmin password * Timeout * Retries * Database type

Test connection

X

 Connection succeeded

Stored Procedures

 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

Etapa 3. Configurar a autenticação de usuário

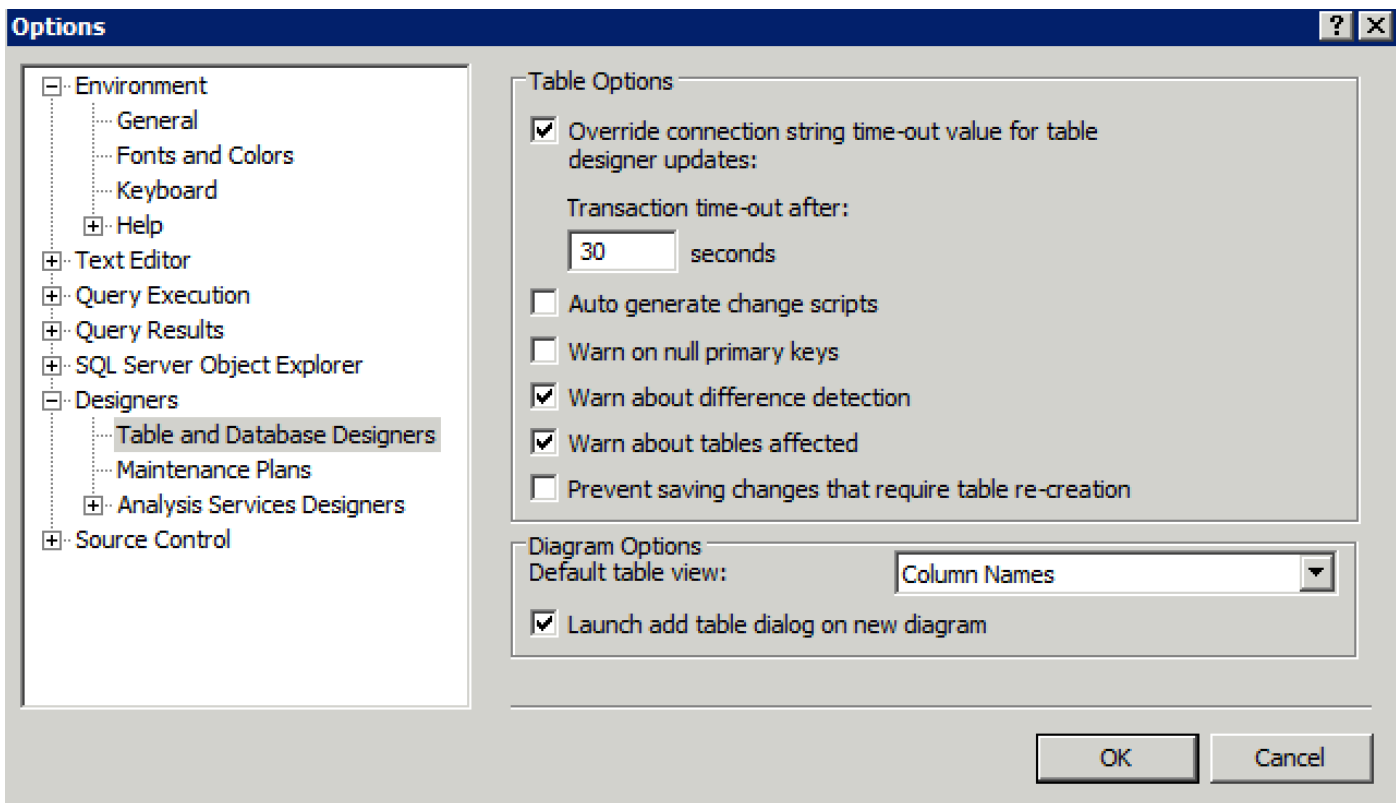
A autenticação ISE ao ODBC usa procedimentos armazenados. O procedimento armazenado para a autenticação retorna o **resultset** com esta sintaxe:

Valor	Tipo
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)

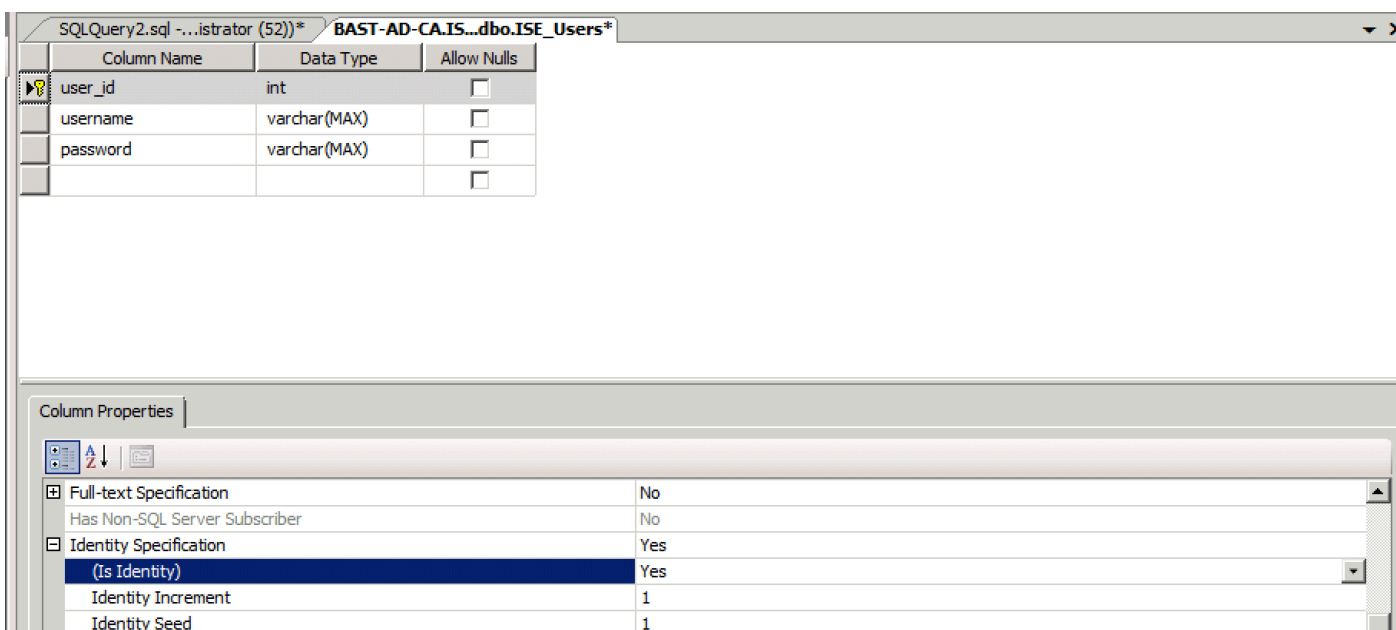
Para outros procedimentos, refira o [Guia de Administração do 2.1 do Cisco Identity Services Engine](#)

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):



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**:



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):

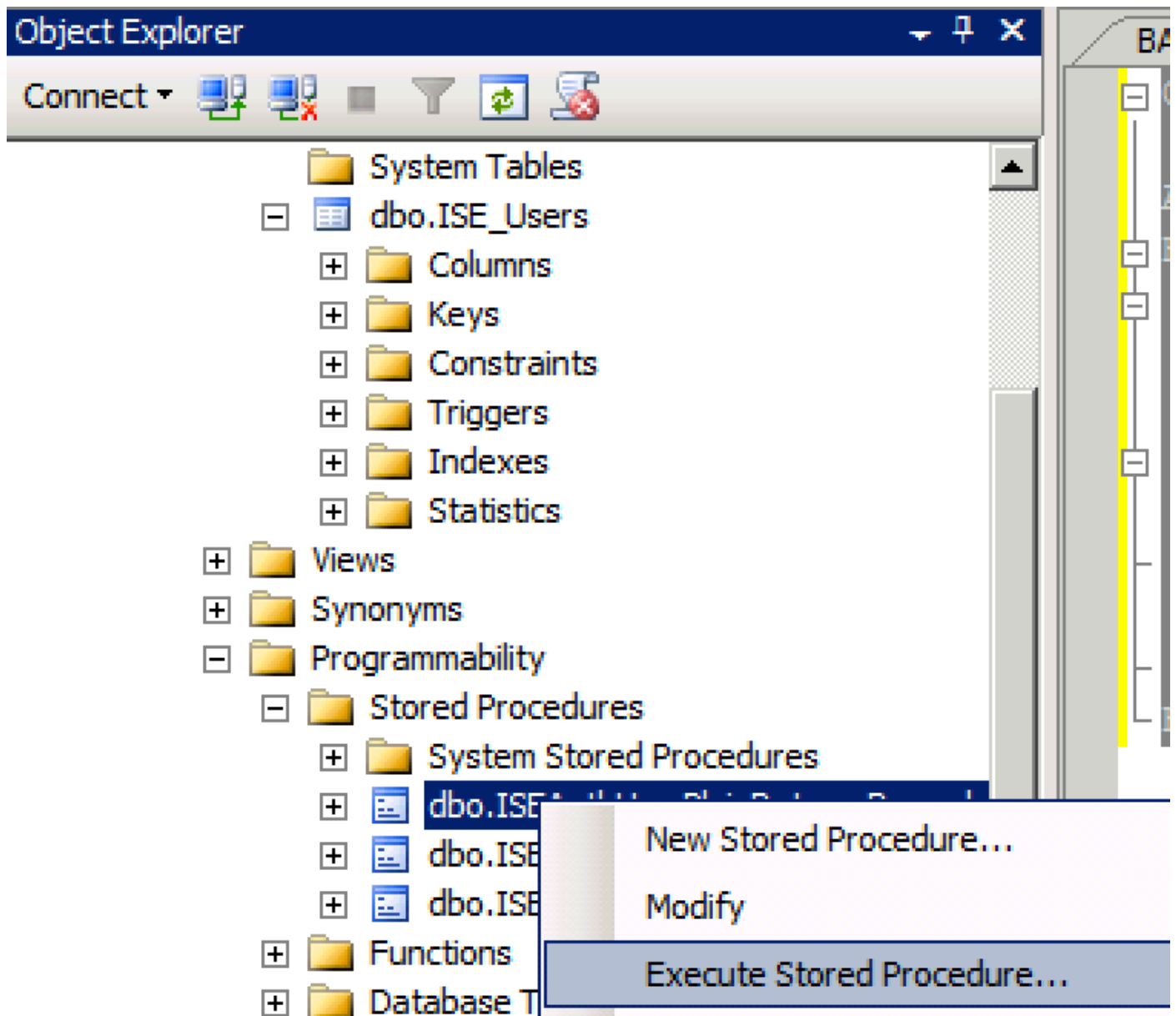
```
CREATE PROCEDURE [dbo].[ISEFetchPasswordReturnsRecordset]
@username varchar(255)
AS
BEGIN
IF EXISTS( SELECT username
FROM ISE_Users
WHERE username = @username)
SELECT 0,11,'This is a very good user, give him all access','No Error',password
FROM ISE_Users
WHERE username = @username
ELSE
SELECT 3,0,'odbc','ODBC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

6. 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):

```
CREATE PROCEDURE [dbo].[ISEUserLookupReturnsRecordset]
@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'
FROM ISE_Users
WHERE username = @username
ELSE
SELECT 3,0,'odbc','ODBC Authen Error'
END
```

7. Teste procedimentos criados:



Execute Procedure - [dbo].[ISEAuthUserPlainReturnsRecordset]

Select a page: General

Script Help

Parameter	Data Type	Output Parameter	Pass Null Value	Value
@username	varchar(255)	No	<input type="checkbox"/>	odbcuser1
@password	varchar(255)	No	<input type="checkbox"/>	odbcpass

Connection

Server: localhost

Connection: BABALAND\administrator

[View connection properties](#)

Progress

Ready

OK Cancel

SQLQuery5.sql -...inistrator (57)) BAST-AD-CA.IS...dbo.ISE_Users SQLQuery2.sql -...istrator (52))* BAST-AD-CA.IS...dbo.ISE_Users

```

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 Messages

	(No column name)	(No column name)	(No column name)	(No column name)
1	0	11	This is a very good user, give him all access	No Error

Teste outros procedimentos da mesma forma.

8. Configurar procedimentos no ISE e salvar:

[ODBC List](#) > **ISE_ODBC**

ODBC Identity Source












General

Connection

Stored Procedures





Attributes

Groups

Stored procedure type	Returns recordset	
Plain text password authentication	ISEAuthUserPlainReturnsRecordset	 
Plain text password fetching	ISEFetchPasswordReturnsRecordset	 
Check username or machine exists	ISEUserLookupReturnsRecordset	 
<hr/>		
Fetch groups		 
Fetch attributes		 
Search for MAC Address in format	XX-XX-XX-XX-XX-XX	

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

Authentication Policy

<input checked="" type="checkbox"/>	MAB	: If Wired_MAB OR Wireless_MAB	Allow Protocols : Default Network Access	and	Edit 
<input checked="" type="checkbox"/>	Default	:use Internal Endpoints			
<input checked="" type="checkbox"/>	Dot1X	: If Wired_802.1X OR Wireless_802.1X	Allow Protocols : Default Network Access	and	Edit 
<input checked="" type="checkbox"/>	Default	:use All_User_ID_Stores			
 <input checked="" type="checkbox"/>	test_aaa	: If Radius:Service-Type EQUALS Login	Allow Protocols : Default Network Access	and	Edit 
<input checked="" type="checkbox"/>	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.
```

Overview

Event	5200 Authentication succeeded
Username	odbcuser1
Endpoint Id	
Endpoint Profile	
Authentication Policy	Default >> test_aaa >> Default
Authorization Policy	Default >> Default
Authorization Result	PermitAccess

Authentication Details

Source Timestamp	2016-06-08 11:04:07.004
Received Timestamp	2016-06-08 11:04:07.005
Policy Server	bise236
Event	5200 Authentication succeeded
Username	odbcuser1
Authentication Identity Store	ISE_ODBC

Steps

```
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
```

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 [PRIMARY]
```

```
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
Stored procedure type		Returns recordset		
Plain text password authentication	ISEAuthUserPlainReturnsRecordset			
Plain text password fetching	ISEFetchPasswordReturnsRecordset			
Check username or machine exists	ISEUserLookupReturnsRecordset			
Fetch groups		ISEGroupsRetrieval		
Fetch attributes		ISEAttrsRetrieval		
Search for MAC Address in format		xx-xx-xx-xx-xx-xx		

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

ODBC Identity Source

General Connection Stored Procedures Attributes **Groups**

Edit + Add X Delete

Name	Name in ISE
No data available	

Select Groups from ODBC X

Sample User or Machine: Retrieve Groups

Name	Name in ISE
<input checked="" type="checkbox"/> ODBCGroup1	ODBCGroup1
<input checked="" type="checkbox"/> ODBCGroup2	ODBCGroup2

OK 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 Provisioning Policy Elements

Policy Sets

Search policy names & descriptions.

Summary of Policies

Global Exceptions

TestAAA

VPN

Default

Save Order Reset Order

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](#)

Status	Name	Description	Conditions	Edit
<input checked="" type="checkbox"/>	TestAAA		Radius:Service-Type EQUALS Login	Edit

Authentication Policy

<input checked="" type="checkbox"/>	Default Rule (if no match)	Allow Protocols : Default Network Access	and use : ISE_ODBC	Edit
-------------------------------------	----------------------------	--	--------------------	------

Authorization Policy

Exceptions (0)

Standard

Status	Rule Name	Conditions (identity groups and other conditions)	Permissions	Edit
<input checked="" type="checkbox"/>	Group1Access	if ISE_ODBC:ExternalGroups EQUALS ODBCGroup1	then PermitAccess	Edit
<input checked="" type="checkbox"/>	Default	if no matches, then	DenyAccess	Edit

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

```
b3560#test aaa group ISE236 odbcuser1 odhcpass 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].[ISEAttrRetrieval]
@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 password authentication: ISEAuthUserPlainReturnsRecordset

Plain text password fetching: ISEFetchPasswordReturnsRecordset

Check username or machine exists: ISEUserLookupReturnsRecordset

Fetch groups: ISEGroupsRetrieval

Fetch attributes: ISEAttrsRetrieval

Search for MAC Address in format: xx-xx-xx-xx-xx-xx

5. Busque os atributos:

Select Attributes from ODBC

X

Sample User or Machine:

<input type="checkbox"/>	Name	Type	Default Value	Name in ISE
<input type="checkbox"/>	AwsomenessLevel	STRING	100	AwsomenessLevel
<input type="checkbox"/>	UserType	STRING	admin	UserType

6. Ajuste regras ISE:

Status	Rule Name	Conditions (identify groups and other conditions)	Permissions	
✓	Group1Access	if ISE_ODBC:ExternalGroups EQUALS ODBCGroup1	then PermitAccess	Edit ▾
✓	AwesomeUser	if ISE_ODBC:AwesomenessLevel EQUALS 100	then PermitAccess	Edit ▾
✓	Default	if no matches, then	DenyAccess	Edit ▾

Refresh Reset Repeat Counts Export To Filter ▾

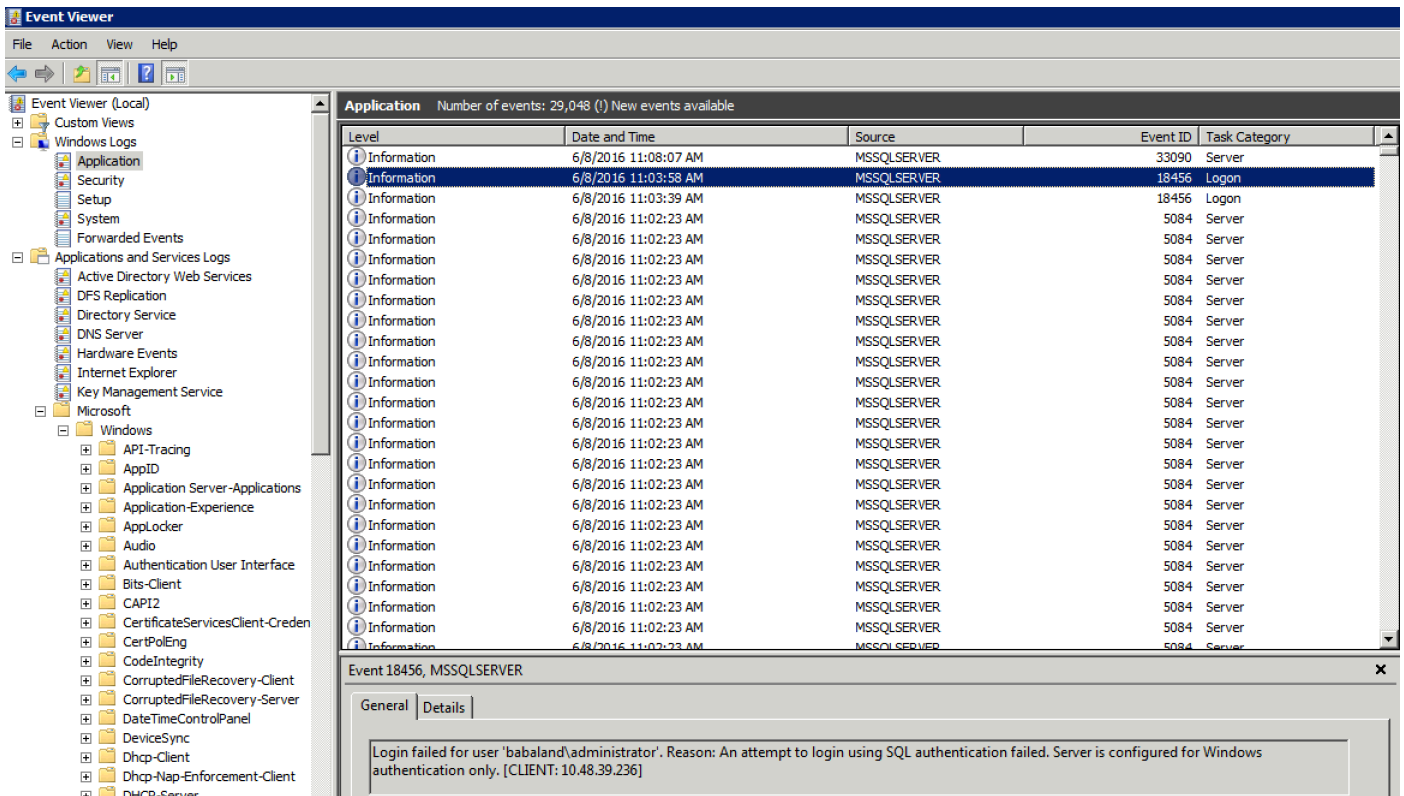
Time	Status	Details	Repeat ...	Identity	Endpoint ID	Endpoint Pr...	Authenticat...	Authorization Policy	Authorizatio...
Jun 08, 2016 12:21:45.596 PM	✓			Identity	Endpoint ID	Endpoint Prof	Authenticator	Authorization Policy	Authorization
				odbcuser2			TestAAA >> ...	TestAAA >> AwesomeUser	PermitAccess

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-pool1177][]
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)
```

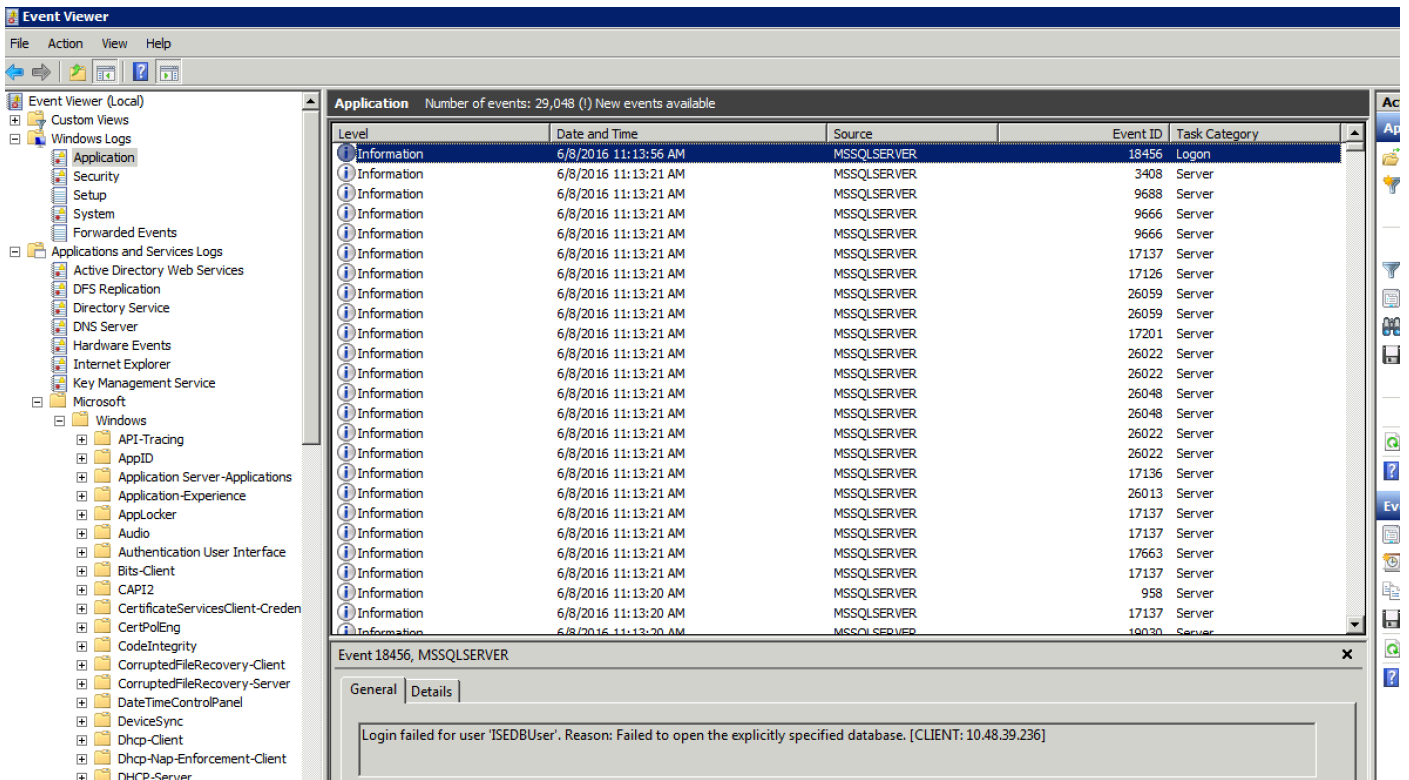


Exemplo de permissões faltantes do usuário abrir o base de dados:

```

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)

```



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=odbuser2,
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=odbuser2, password=***
2016-06-08 12:26:56,014 DEBUG [Thread-4051][] cisco.cpm.odbcidstore.impl.OdbcConnection -:::-
Execute stored procedure call

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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, Connection 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 empty 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

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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 returned 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
```