ODBC を使って MS SQL の ISE 2.1 を設定する

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概要

このドキュメントでは、Open Database Connectivity(ODBC)を使用して Identity Services Engine(ISE)認証を行うための Microsoft Standard Query Language(SQL)サーバでの ISE の 設定方法について説明します。

注: Open Database Connectivity(ODBC)認証では、ISE がプレーン テキストのパスワー ドを取得できることが必要です。 データベース内でパスワードを暗号化できますが、**スト アドプロシージャ**で復号する必要があります。

前提条件

要件

次の項目に関する知識が推奨されます。

- ・データベースと ODBC の概念
- Microsoft SQL Server

使用するコンポーネント

このドキュメントの情報は、次のソフトウェアとハードウェアのバージョンに基づくものです。

- Identity Services Engine 2.1
- MSSQL Server 2008 R2



ステップ 1: MS SQL の基本設定

設定手順には、データベースと、そのデータベースにアクセスする権限を持つ 1 つの ISE ユーザの作成が含まれます。

注: ISE は SQL サポートします。Windows アカウントはサポートしません。 認証モードを 変更する必要がある場合は、「<u>サーバ認証モードの変更</u>」を参照してください。

1. SQL Server Management Studio を開き([Start] メニュー [Microsoft SQL Server 2008 R2])、 データベースを作成します。

K Microsoft SQL Serve	er Management Studio
File Edit View De	ebug Tools Window Community Help
🕴 🔔 New Query 🛛 🛅 🗎	🜇 🜇 🕞 😂 🖃 🍊 🕮 💂
Object Explorer	+ ₽ ×
Connect 🕶 📑 📑	T 🛃 🍒
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🗆 🧰 Sys	New Database
± 💆	Attach
E E E	Restore Database
🚊 Dat	Restore Files and Filegroups
E Security F Server	Start PowerShell
🕀 🧰 Replicat	Reports +
Manage SQL Ser	Refresh

2. デフォルト オプションをそのままにするか、次のイメージに示すようにデータベース設定を調整します。

🚪 New Database							×
Select a page	🔄 Script 👻 📑 I	Help					
General							
Filegroups	Database name:		ISEDB				
	Owner:		<default></default>				
	🔽 Use full-text i	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							
Ready	•					Þ	
The start						Add Remove	
						OK Cancel	1

3. 次のイメージに示すように、ユーザを作成し、権限を設定します。



🚪 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	
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	Delaukianguage:		
		ОК	Cancel

Login Properties - ISEDBUser	ı.			
Select a page	🕄 Script 🕞	🖪 Help		
🚰 General 🚽	<u> </u>			
Server Roles	Lleare man	upad to this login:		
User Mapping	Maa	Detekara	11	Defect Colorea
		Lacabase	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	🗌 db_ba	ckupoperator		
localhost	✓ db_da	tareader		
Connection	v db_da	tawriter		
BABALAND\administrator		ladmin		
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View connection properties		iner		
	db_on	curitvadmin		
Progress	public	,		
Ready	<u> </u>			
. of the				
				OK Cancel

ステップ 2: ISE の基本設定

[Administration] > [External Identity Source] > [ODBC] で **ODBC Identity Source** を作成し、接続を テストします。

ODBC List > ISE_ODBC

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

ステップ3:ユーザ認証の設定

ODBC の ISE 認証では、ストアド プロシージャを使用します。認証のストアド プロシージャは 次のシンタックスで resultset を返します。

值	タイプ
結果	Integer
グループ(ACS 4.2 のみと互換)	整数または varchar(255)
アカウント情報	varchar(255)
エラー文字列	varchar(255)

他の手順については、『<u>Cisco Identity Services Engine 2.1 アドミニストレーション ガイド</u>』を 参照してください。

ヒント: resultset の代わりに名前付きパラメータが返されることがあります。 これは別の タイプの出力ですが、機能は同じです。

1. オプションに移動し、[Prevent saving change that require table re-creation] チェックボックス をオフにします(オプション)。

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
	OK Cancel

2. テーブルを作成します。 **プライマリ キー**に ID 設定が行われていることを確認します。 user_id を**プライマリ キー**として設定するには、[column name] を右クリックします。

	SQLQuery2.sqlistrator	(52))* BAST-AD	-CA.ISdbo.IS	_Users*		+)
	Column Name	Data Type	Allow Nulls			
ľ	🛿 user_id	int				
	username	varchar(MAX)				
	password	varchar(MAX)				
	Column Droportion					
	₽ <mark>2</mark> ↓ □					
					No	
	Has Non-SQL Server Sub	scriber			No	
	Identity Specification				Yes	
	(Is Identity)				Yes	-
	Identity Increment				1	
	Identity Seed				1	

最後の 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]

3.1人のユーザを挿入するには、このクエリーを実行します。

(

) ON [PRIMARY]

insert into ISE_Users(username,password) values('odbcuser1','odbcpass'); 4. プレーン テキストのパスワード認証のプロシージャを作成します(PAP、EAP-GTC 内部メソッド、TACACS に使用)。

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. プレーン テキストのパスワードの取得プロシージャを作成します(CHAP、MSCHAPv1/v2、 EAP-MD5、LEAP、EAP-MSCHAPv2 内部メソッド、TACACS に使用)。

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. ユーザ名またはマシンの存在を確認するプロシージャを作成します(MAB、REAP の高速接続 、EAP-FAST、および EAP-TTLS に使用)。 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. 作成したプロシージャをテストします。



Series a page Series Series Ser	🐙 Execute Procedure - [dbo].[ISEAuthUserPlainR	eturnsRecordset]		
Personal Pe	Select a page	🔄 Script 👻 📑 Hel	p			
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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 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				
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	(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	ser, give him all access			

同じ方法で他のプロシージャをテストします。

8. ISE でプロシージャを設定し、保存します。

ODBC List > **ISE_ODBC**

OD	BC Identity So	ource				
	General	Connection	Stored Procedures	Attribute	S	Groups
	Stor	ed procedure type	Returns recordset	•		
	Plain text passw	ord authentication	ISEAuthUserPlainReturnsReco	ordset	i) 🕀	
	Plain text	password fetching	ISEFetchPasswordReturnsRec	cordset	i) 🕀	
	Check username	or machine exists	ISEUserLookupReturnsRecord	dset	i) 🕀	
		Fetch groups			i	
		Fetch attributes			i) 🕀	
	Search for MAC	C Address in format	XX-XX-XX-XX-XX	•	(i)	

9. ODBC を使用して簡単な認証ルールを作成し、テストします。

•	Aut	hent	tication Policy				
			MAB	: If Wired_MAB OR Wireless_MAB :use Internal Endpoints	Allow Protocols : Default Network Access	and	Edit ▼
			Dot1X Default	: If Wired_802.1X OR 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 :use ISE_ODBC	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	
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 - $\ensuremath{ISE}\xspace_{ODBC}$
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

ステップ4:グループ取得の設定

1. ユーザ グループグループが含まれているテーブルと、多対多マッピングに使用する別のテーブ ルを作成します。

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. ODBCUSER1 が両方のグループに属するように、グループとマッピングを追加します。

```
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. グループ取得プロシージャを作成します。
```

```
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. そのプロシージャを[Fetch groups] にマップします。
```

ODBC List > ISE_ODBC

ODBC Identity Source

General	Connection	Stored Procedures	Attributes	Groups
S	tored procedure type	Returns recordset	Ψ	
Plain text pas	sword authentication	ISEAuthUserPlainReturnsRec	cordset	\oplus
Plain te	xt password fetching	ISEFetchPasswordReturnsRe	cordset	\oplus
Check usernar	ne or machine exists	ISEUserLookupReturnsRecor	rdset	\oplus
	Fetch groups	ISEGroupsRetrieval	(i)	Ð
	Fetch attributes	ISEAttrsRetrieval	i	\oplus
Search for M	IAC Address in format	xx-xx-xx-xx-xx	• (i)	

5. グループを取得し、それらを [ODBC Identity Source] に追加します。

ODBC List > ISE_ODB	С		
ODBC Identity So	urce		
General	Connection	Stored Procedures Attributes Groups	
/ Edit 🕂 Add 👻	🗙 Delete		
Name		Name in ISE	
		No data available	
		Select Groups from ODBC	X
		Sample User or Machine odbcuser1	() Retrieve Groups
		Name Name in ISE	
		ODBCGroup1 ODBCGroup2	
			OK Cancel

6. どのグループにも属していない別のユーザを追加します。

insert into ISE_Users(username,password) values('odbcuser2','odbcpass'); 7. 特定のポリシー セットを作成し、テストします。

Policy Sets Profiling Posture Client Provision	ning	
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	
-∯ P∆ - ↑ - ↓ 🗶 🕰	Status Name Description Conditions	Edit
Summary of Policies A list of all your policies	Authentication Policy	
Use across entire deployment	Default Rule (If no match) : Allow Protocols : Default Network Access and use : ISE_ODBC	Edit 🕶
Z TestAAA		
VPN	✓ Authorization Policy	
Default Default Policy Set	Exceptions (0) Standard	
Jave Order Reset Order	Status Conditions (identity groups and other conditions) Permissions Image: Complex status If ISE_ODBC:ExternalGroups EQUALS then PermitAccess ODBCGroup1 ODBCGroup1 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

ステップ5:属性取得の設定

1. この例を簡略化するため、属性にフラット テーブルを使用しています。

```
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. ユーザの1人の属性を作成します。

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. ストアドプロシージャを作成します。

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. そのプロシージャを [Fetch attributes] にマップします。
```

ODBC List > ISE_ODBC

ODBC Identity Source

General	Connection	Stored Procedures	Attributes	Groups
S	tored procedure type	Returns recordset	•	
Plain text pas	sword authentication	ISEAuthUserPlainReturnsRec	cordset	\oplus
Plain te	xt password fetching	ISEFetchPasswordReturnsRe	cordset	\oplus
Check usernar	ne or machine exists	ISEUserLookupReturnsRecor	dset	\oplus
	Fetch groups	ISEGroupsRetrieval	i	\oplus
	Fetch attributes	ISEAttrsRetrieval	(1)	\oplus
Search for M	IAC Address in format	xx-xx-xx-xx-xx	• (1)	

5. 属性を取得します。

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. ISE ルールを調整します。

	Status	Rule Name Group1Access	if	Conditions (ISE_ODBC:I ODBCGroup	identity grou ExternalGrou 1	ps and other conditions ups EQUALS) then	Permissions PermitAcces	s			I	Edit 🕶
	A	wesomeUser		ISE_ODBC:	Awsomenes	sLevel EQUALS 100		PermitAcces	S			I	Edit 🔻
	- C	Default	if no	matches, th	ien Deny	Access						E	Edit 🔻
${\cal C}$ Refr	resh C	Reset Repeat Counts	Export To 🗸										🔻 Filter 🕶
٦	Time		Status	Details	Repeat	Identity	Endpoint	ID	Endpoint Pr	Authenticat	Authorization Policy		Authorizatio
×			\$			Identity	Endpoint	ID	Endpoint Profi	Authentication	Authorization Policy		Authorization
	Jun 08, 20 [.]	16 12:21:45.596 PM	~	ò		odbcuser2				TestAAA >>	TestAAA >> AwesomeUser		PermitAccess

トラブルシューティング

接続がうまくいかない場合、Windows のイベント ログを確認します。 接続を試行している間に ISE で show logging application prrt-management.log tail コマンドを使用します。

不正な認証モードの例:

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)	Application Number of	fevents: 29,048 (!) New events available				
Custom Views	Laval	Data and Time	Course	Event ID	Task Catagony	
Windows Logs	Level		Source	Event ID	Task Category	
Application	Information	6/8/2016 11:08:07 AM	MSSQLSERVER	19456	Server	
Security	Tafamatian	6/8/2016 11:03:38 AM	MSSQLSERVER	10456	Logon	
Setup	Triformation	6/8/2016 11:03:39 AM	MSSQLSERVER	10430	Conver	
Enruarded Events	Tafamatian	6/8/2016 11:02:25 AM	MSSQLSERVER	5084	Server	
Applications and Services Logs	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5004	Server	
Active Directory Web Services	Tafarmation	6/8/2016 11:02:25 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	MSSQLSERVER	5004	Server	
DNS Server	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Hardware Events	Information	6/8/2010 11:02:22 AM	MSSQLSERVER	5004	Server	
👔 Internet Explorer	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
🛃 Key Management Service	Information	6/8/2010 11:02:22 AM	MSSQLSERVER	5004	Server	
🖃 🧮 Microsoft	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
E Windows	Information	6/8/2016 11:02:22 AM	MSSQLSERVER	5004	Server	
API-Tracing	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
AppID	Information	6/8/2016 11:02:22 AM	MSSQLSERVER	5004	Server	
Application Server-Applications	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Application-Experience	Information	6/8/2016 11:02:22 AM	MSSQLSERVER	5004	Server	
Audio	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
Autonication User Interface	Information	6/8/2016 11:02:22 AM	MSSQLSERVER	5004	Server	
Bits-Client	Information	6/8/2016 11:02:23 AM	MSSQLSERVER	5084	Server	
	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 11:02:22 AM	MSSQLSERVER	5004	Server	-
🗉 🧮 CodeIntegrity	Event 19456 MECOLEE					
🗉 🧮 CorruptedFileRecovery-Client	Event 10400, MISSQLSER					
🕀 🧮 CorruptedFileRecovery-Server	General Details					
DateTimeControlPanel	Ceams					1
DeviceSync	Login failed for use	r 'hahaland' administrator' Reason: An attem	ant to login using SOL authentication f	ailed Server is configured for	Windows	_
Dhcp-Client	authentication only	/ ICLIENT: 10.48.39.2361	ipt to login using SQL authentication is	alleu, server is configured for	windows	
Dhcp-Nap-Enforcement-Client		.[etter#110.40.55.250]				
141 IIII DHCP-Server						

データベースを開く権限を失っているユーザの例:

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 e	vents: 29,048 (!) New events available			Ac
Custom Views					
🖃 🚉 Windows Logs	Level	Date and Time	Source	Event ID Task Category	
Application	Information	6/8/2016 11:13:56 AM	MSSQLSERVER	18456 Logon	
🛃 Security	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	3408 Server	- II 🐳
Setup	1 Information	6/8/2016 11:13:21 AM	MSSQLSERVER	9688 Server	
System	(1) 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	The second se
Drs 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	- I w
Division Server	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17201 Server	
Tatamat Events	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
Kov Management Service	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
Microsoft	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26048 Server	
E Windows	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26048 Server	
API-Tracing	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26022 Server	
Application Server-Applications	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17136 Server	?
Application-Experience	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	26013 Server	
Ŧ 🧮 AppLocker	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	Ev
🕀 🧰 Audio	(i) Information	6/8/2016 11:13:21 AM	MSSQLSERVER	17137 Server	
🕀 🧮 Authentication User Interface	(i) 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	MSSOLSERVER	17137 Server	
🕀 🧰 CertPolEng	Information	6/8/2016 11:13:20 AM	MSSOLSED//ED	10030 Server	
🕀 🚞 CodeIntegrity	Event 18456 MSSOI SERVE	R			x
E CorruptedFileRecovery-Client					
CorruptedFileRecovery-Server	General Details				
DateTimeControlPanel					1
DeviceSync	Login failed for user "	SEDBLIGET' Reason: Failed to onen the evolu-	citly specified database. [CLIENT: 10.49	20.2361	
⊡ Dhcp-Client	Login railed for user 1	sebboser, Reason, railed to open the expli	city specified database. [CLENT: 10.46.	[04:60]	
Dhcp-Nap-Enforcement-Client					
I+I III DHCP-Server					

DB 操作をトラブルシューティングするには、[Administration]> [System] > [Logging] > [Debug Log Configuation] で、ロギング コンポーネント odbc-id-store を DEBUG レベルに有効にします 。

ログは prrt-management.log ファイルに配置されます。

odbuser2 の例:

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