

Import error - Could not load schema model from Package

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Issue

Importing BACPAC, typically to a local SQL Server instance and are running into this error:

Error

Could not load schema model from package. (Microsoft.SqlServer.Dac)

Internal Error. The internal target platform type SqlAzureV12DatabaseSchemaProvider does not support schema file version '3.3'. (File: D:\MyDB.bacpac) (Microsoft.Data.Tools.Schema.Sql)

They essentially need to update their DacFx on the machine doing the import process. Here is an explanation from the PG.

Mitigation

The issue is that the customer needs to update their version of DacFx on their machine. They can do this by [installing the latest SSMS preview](#) and using that to Import, or using SqlPackage from the "C:\Program Files (x86)\Microsoft SQL Server\130\DAC\bin" location if they're using command line tools.

Cause

The root cause is that these databases have non-default values for 1 or more Database Scoped Configuration options. As these were only added very recently, older versions of the tools do not understand how to deploy them and so DacFx blocks. These are the only properties/objects with that high a schema version. Basically any time you see "does not support schema file version '3.3'" it means you need to upgrade.

For reference, I'm including the properties and their default values below. If any of these properties are non-default on the DB when exporting the schema version gets bumped so that old tools do not break.

```
<!-- Database Scoped Configurations-->
```

```
<Property Name="MaxDop" Type="System.Int32" DefaultValue="0" SqlPlatforms="Sql130|SqlAzureV12"
Version="330" Summary="Models the database scoped configuration for MAXDOP"/>
```

```
<Property Name="MaxDopForSecondary" Type="System.Int32?" DefaultValue="null"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
MAXDOP for the secondary. Null represents PRIMARY"/>
```

```
<Property Name="LegacyCardinalityEstimation" Type="System.Boolean" DefaultValue="false"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
Legacy Cardinality Estimation"/>
```

```
<Property Name="LegacyCardinalityEstimationForSecondary" Type="System.Boolean?" DefaultValue="null"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
Legacy Cardinality Estimation for the secondary. Null represents PRIMARY"/>
```

```
<Property Name="ParameterSniffing" Type="System.Boolean" DefaultValue="true"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
parameter sniffing"/>
```

```
<Property Name="ParameterSniffingForSecondary" Type="System.Boolean?" DefaultValue="null"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
parameter sniffing for secondary. Null represents PRIMARY"/>
```

```
<Property Name="QueryOptimizerHotfixes" Type="System.Boolean" DefaultValue="false"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
query optimizer hot fixes"/>
```

```
<Property Name="QueryOptimizerHotfixesForSecondary" Type="System.Boolean?" DefaultValue="null"
SqlPlatforms="Sql130|SqlAzureV12" Version="330" Summary="Models the database scoped configuration for
query optimizer hot fixes for the secondary. Null represents PRIMARY"/>
```

Response to customer

Are the developers importing this with tools such as SQL Server Management Studio? If so I would highly recommend that they use the SSMS 2016 standalone to import the database which the standalone installer can be found here.

<https://msdn.microsoft.com/en-us/library/mt238290.aspx>

Otherwise, you can upgrade the DAC library to the latest version from here:

https://www.microsoft.com/en-us/download/details.aspx?id=51941&WT.mc_id=rss_alldownloads_extensions

In the system requirements, you will want to make sure you have those two other dependencies as well. The reason for this is that recently the databases have added database scoped configurations that older versions expect specific values that if different, can cause this error.

Here is the query to see the values of the database scoped configurations:

```

SELECT [dbscm].[value]                AS [MaxDop],

    [dbscm].[value_for_secondary]     AS [MaxDopForSecondary],

    [dbsccl].[value]                  AS [LegacyCardinalityEstimation],

    [dbsccl].[value_for_secondary]    AS [LegacyCardinalityEstimationForSecondary],

    [dbscsp].[value]                  AS [ParameterSniffing],

    [dbscsp].[value_for_secondary]    AS [ParameterSniffingForSecondary],

    [dbscq].[value]                   AS [QueryOptimizerHotfixes],

    [dbscq].[value_for_secondary]     AS [QueryOptimizerHotfixesForSecondary]

FROM [sys].[databases] [db] WITH (NOLOCK)

LEFT JOIN [sys].[database_scoped_configurations] AS [dbscm] WITH (NOLOCK) ON [dbscm].[name] =
N'MAXDOP'

LEFT JOIN [sys].[database_scoped_configurations] AS [dbsccl] WITH (NOLOCK) ON [dbsccl].[name] =
N'LEGACY_CARDINALITY_ESTIMATION'

LEFT JOIN [sys].[database_scoped_configurations] AS [dbscsp] WITH (NOLOCK) ON [dbscsp].[name] =
N'PARAMETER_SNIFFING'

LEFT JOIN [sys].[database_scoped_configurations] AS [dbscq] WITH (NOLOCK) ON [dbscq].[name] =
N'QUERY_OPTIMIZER_HOTFIXES'

WHERE [db].[name] = DB_NAME();

```

The Default values are as follows:

MaxDop: 0

MaxDopForSecondary: null

LegacyCardinalityEstimation: false

LegacyCardinalityEstimationForSecondary: null

ParameterSniffing: true

ParameterSniffingForSecondary: null

QueryOptimizerHotfixes: false

QueryOptimizerHotfixesForSecondary: null

One of the most common ones that is an issue is the MaxDop will be seen as 1, where it is expecting 0. Changing from V11 to V12 for instance can change this value to be a 1 but as far as the engine and query execution, it is the same. You can change the value if 1 and not 0 with this command:

```
ALTER DATABASE SCOPED CONFIGURATION SET MAXDOP = 0
```

If this is the only value that you see is different, then that should allow for skipping the above steps however I would still recommend using the latest versions.

Classification

Root Cause: Azure SQL DB v2\Import/Export\User Issue/Error

How good have you found this content?

