

Import or Export Array Dimensions exceeded support range

Last updated by | Keith Elmore | Apr 5, 2021 at 7:56 AM PDT

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Issue

Importing database via the portal fails with an error message as follows

"Could not export schema and data from database. One or more errors occurred. One or more errors occurred. One or more errors occurred. One or more errors occurred. One or more errors occurred. Array dimensions exceeded supported range."

Exporting from sqlpackage.exe can also fail with the following

```
Microsoft.Data.Tools.Diagnostics.Tracer Error: 19 : 2021-01-30T02:56:55 : Retry requested: Retry count = 1. Delay
= 00:00:00, SQL Error Code = , SQL Error Number = , Can retry error = False, Will retry = False
System.OutOfMemoryException: Array dimensions exceeded supported range.
at System.Data.SqlClient.TdsParser.TryReadPlpUnicodeChars(Char[]& buff, Int32 offst, Int32 len,
TdsParserStateObject stateObj, Int32& totalCharsRead)
at System.Data.SqlClient.TdsParser.TryReadSqlStringValue(SqlBuffer value, Byte type, Int32 length, Encoding
encoding, Boolean isPlp, TdsParserStateObject stateObj)
at System.Data.SqlClient.TdsParser.TryReadSqlValue(SqlBuffer value, SqlMetaDataPriv md, Int32 length,
TdsParserStateObject stateObj, SqlCommandColumnEncryptionSetting columnEncryptionOverride, String
columnName)
at System.Data.SqlClient.SqlDataReader.TryReadColumnInternal(Int32 i, Boolean readHeaderOnly)
at System.Data.SqlClient.SqlDataReader.TryReadColumn(Int32 i, Boolean set Timeout, Boolean
allowPartiallyReadColumn)
at System.Data.SqlClient.SqlDataReader.GetSqlString(Int32 i)
at System.Data.SqlClient.SqlDataReader.GetChars(Int32 i, Int64 dataIndex, Char[] buffer, Int32 bufferIndex, Int32
length)
at Microsoft.Data.Tools.Schema.Sql.SqlClient.Bcp.TextTypesSerializer.<GetByteChunks>d__d.MoveNext()
at Microsoft.Data.Tools.Schema.Sql.SqlClient.Bcp.VarCharSerializer.<GetBytes>d__0.MoveNext()
at Microsoft.Data.Tools.Schema.Sql.SqlClient.Bcp.SqlRawStream.Read(Byte[] buffer, Int32 offset, Int32 count)
at System.IO.Stream.InternalCopyTo(Stream destination, Int32 bufferSize)
at Microsoft.Data.Tools.Schema.Sql.Dac.Data.Export.ExportTableBatchHelper.WriteRow(DataReaderIterator
dataReaderIterator)
at Microsoft.Data.Tools.Schema.Sql.Dac.Data.Export.ExportTablePartHelper.ProcessDataBatch(DataReaderIterator
```

```
dataReaderIterator, RetryState retryState)
at Microsoft.Data.Tools.Schema.Sql.Dac.Data.Export.ExportTablePartHelper.ExportTableWithRetryState(RetryState
retryState)
at Microsoft.Data.Tools.Schema.Common.SqlClient.RetryPolicy.<>c__DisplayClass4.
<ExecuteAction>b__3(RetryState retryState)
at Microsoft.Data.Tools.Schema.Common.SqlClient.RetryPolicy.ExecuteAction[R](Func`2 func, Nullable`1 token)
Microsoft.Data.Tools.Diagnostics.Tracer Error: 19 : 2021-01-30T02:56:55 :
```

Investigation/Analysis

The following query can be used to find the failed imports

```
MonManagementOperations
| where TIMESTAMP >= ago(10d)
| where operation_parameterscontains'>c7503184-1cfb-49a3-8452-
a6324565c1b8<'and operation_parameterscontains'>abco01mstr1c52wprod<'and operation_type ==
'ExportDatabase'
| extend d=parse_xml(operation_parameters)
|
extend ServerName=iif(isempty(tostring(d.InputParameters.LogicalServerName)),tostring(d.InputParameters.Serv
erName),tostring(d.InputParameters.LogicalServerName))
| extend CreateDatabaseName = tostring(d.InputParameters.DatabaseName)
| extend LogicalDatabaseName = tostring(d.InputParameters.LogicalDatabaseName)
| extend ServiceLevelObjective=tostring(d.InputParameters.ServiceObjectiveName)
| extend DatabaseName = iif(isempty(CreateDatabaseName), LogicalDatabaseName, CreateDatabaseName)
| project TIMESTAMP, request_id, message, event, operation_type, ServerName, DatabaseName,
ServiceLevelObjective
| join kind=inner (
MonManagement
| summarize min(originalEventTimestamp), max(originalEventTimestamp), max(service_level_objective_name),
max(serviceLevelObjective) by request_id
) on request_id
| join kind=inner (
MonManagementOperations
| summarize make_list(event), make_list(PreciseTimeStamp), min(PreciseTimeStamp),
arg_min(operation_parameters, PreciseTimeStamp), any(operation_category) by request_id, operation_type
| order by min_PreciseTimeStamp desc
| extend ongoing_operation = array_length(list_event) == 1 and list_event[0] == 'management_operation_start'
| extend succeeded_operation = array_length(list_event) >= 1
and list_eventcontains'management_operation_success'
| extend operation_timed_out = array_length(list_event) >= 1
and list_eventcontains'management_operation_timeout'
| extend ongoing_operation = case(ongoing_operation == 0, 'False', 'True')
| extend succeeded_operation = case(succeeded_operation == 0, 'False', 'True')
| extend operation_timed_out = case(operation_timed_out == 0, 'False', 'True')
| extend event_list = tostring(list_event)
| extend event_timestamp = tostring(list_PreciseTimeStamp)
| project renameTimeStamp = min_PreciseTimeStamp
| project renameoperation_category = any_operation_category
```

```
| project-awaylist_event, list_PreciseTimeStamp, PreciseTimeStamp, event_timestamp
| projectTimeStamp, operation_type, operation_parameters, request_id, ongoing_operation,
succeeded_operation, operation_timed_out
) onrequest_id
| extendelapsed_time_min=datetime_diff('minute', max_originalEventTimestamp, min_originalEventTimestamp)
| summarizebystart_time=min_originalEventTimestamp, last_event_time=max_originalEventTimestamp
, elapsed_time_min, request_id, operation_type, ServerName, DatabaseName
, succeeded_operation, ServiceLevelObjective
```

Mitigation

There is a workaround to use the x64 version of SqlPackage:

<https://docs.microsoft.com/en-us/dotnet/framework/configure-apps/file-schema/runtime/gcallowverylargeobjects-element> 

1. Open the sqlpackage.exe.config file in notepad located at "C:\Program Files\Microsoft SQL Server\150\DAC\bin\SqlPackage.exe.config"
2. You will need launch notepad as an elevated administrator process to edit this file
3. Add the gcAllowVeryLargeObjects XML element under the configuration/runtime element:
Save the file

```
<configuration>
  <runtime>
    <gcAllowVeryLargeObjects enabled="true" />
  </runtime>
</configuration>
```

Once this is implemented the import should complete without this error.

Root Cause Classification

Cases resolved by this TSG should be coded to the following root cause:

Root Cause: Azure SQL v3\Import/Export\Import issues\Import failed

****How good have you found this content?****



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