SAP Business One Notes

1645439 - Upgrade may fail with error: String or binary data would be truncated

Version 3 **Validity:**
26.04.2012 - active

Language English

Symptom

Before proceeding to upgrade, please run the query below to make sure you do not have database inconsistency issues which can prevent you from successful upgrade.

Upgrade to SAP Business One 8.81 patch 10 or later can fail with following error raised by SQL Server (can be found in upgrade log file):

[SQL Server]String or binary data would be truncated.

This can be caused by incorrect definition of length limit for User-Defined Field (UDF), when string stored in database contains more characters then allowed by length limit. In such case, string length limit for the affected UDF needs to be increased.

Following SQL query will help you to detect such UDFs. Please note that the query execution can take from minutes to several hours depending on number of UDFs in your database:

```
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            declare @TableID nvarchar(20);

            declare @AliasId nvarchar(18);

            declare @EditSize smallint;

            declare @RealSize smallint;

            declare @statement nvarchar(max);

            declare @params nvarchar(max);

            declare alfa_udfs cursor for

            select TableID, AliasID, EditSize from cufd where TypeID = 'A';

            open alfa_udfs;

            FETCH NEXT FROM alfa_udfs

            INTO @TableID, @AliasId, @EditSize;

            WHILE @@FETCH_STATUS = 0

            BEGIN

                    IF  EXISTS (SELECT * FROM sys.tables WHERE name = @TableId)

                    BEGIN
```

```
                                set @RealSize = 0

                                set @params = '@RealSizeOut smallint output';

                                set @statement = 'select @RealSizeOut = max(len(U_' +
@AliasID + ')) from [' + @TableId + '] where U_' + @AliasID +' is not null';

                                EXECUTE sp_executesql @statement, @params, @RealSizeOut =
@RealSize OUTPUT;

                                if @RealSize is not null

                                BEGIN

                                        if @EditSize < @RealSize

                                        BEGIN

                                                select @TableID As TableName, 'U_' + @AliasId
As UDFName, @RealSize As RealSize, @EditSize As DefinedSize

                                        END

                                END

                        END

                        FETCH NEXT FROM alfa_udfs

                        INTO @TableID, @AliasId, @EditSize;

                END

                CLOSE alfa_udfs;

                DEALLOCATE alfa_udfs;
```


Results:

Results will contain a table, showing the list of UDFs affected by this issue. If there is no result, you are not affected by this issue.

Column *TabeName* shows table, which contains the UDF.

Column *UDFName* shows the name of affected UDF.

Column *RealSize* shows the length of longest string stored in UDF.

Column *DefinedSize* shows length limit from UDF definition.

why we implemented this behavior change?

Database inconsistencies which are being detected by this query resulted in SAP Business One application being shut down randomly.

We have redesigned the application in version 8.82 to prevent such inconsistencies reoccurring in the future.

Redesign changes definition of alphanumeric UDFs from database type nvarchar(max) to

nvarchar([UDF_size]). This brings another major benefit - database indexes can include UDFs in order to optimize performance on objects using them.

Is there a way to automate this process?

Currently, there is no possibility to automate this procedure. Basically there are two approaches:

1. Reducing the length of the string stored in UDF to number of characters allowed by UDF definition - this shall not be done automatically as we can loose important information,

2. Extending UDF definition to accommodate to longest stored string - this shall not be done automatically as customers can by intention allow only specified number of characters in the UDF. If users start to store more characters, it can lead to issues with addons that can accept only limited number of characters as input.

Cause

Consulting

Solution

Extend the UDF field length limit in SAP Business One.

1. Go to Tools -> Customization Tools -> User-Defined Fields - Management

2. Search for a UDF with Title as *UDFName* from query results (without 'U_')

3. Select the UDF and click 'Update'

4. Edit the Length value, set it to *RealSize* from query results

5. Update the UDF definition

Once you do this for all UDFs from results, please try to run upgrade again.

Other terms

UDF

Header Data

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Release status Released for Customer
Component   SBO-BC-UPG Upgrade

Priority	Recommendations/additional info
Category	Consulting

References

This document refers to:

CSS SAP Notes

1627224   Adding more UDF fields to OUSR causes shut down on logon

1357462   Upgrade Wizard Precheck: Collective note for all check items

This document is referenced by:

SAP Business One Notes

1686964   Upgrade Wizard Pre Check: Structure of User-Defined Fields has been modified

1693240   Upgrade fails: String or binary data would be truncated caused by U_Desc of SAP Business One Add-on Fixed Assets

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Validity

Software Component	Version
SAP BUSINESS ONE	8.81
	8.82