1076082 - UDT & UDF related issues

Version 19   **Validity:**
24.06.2014 - active   **Language** English

Symptom

User-Defined Table (UDT) and User-Defined Field (UDF) related issues often have different impacts. For instance you may not be able to perform upgrade of the database or you may receive the following error message after logging to SAP Business One database:
"The database structure has been modified. In order to resume the process, all open windows will be closed. Do you want to continue adding the user-defined field?"

This note provides a few generic queries to detect some common issues about UDT & UDF. If an issue is related to UDT & UDF, the queries provided bellow will detect the inconsistencies known.
1) UDT is defined but does not exist.
2) UDT is not registered.
3) UDF is defined on an unregistered UDT.
4) UDF is defined but does not exist.
5) UDF valid values are defined for a non-existing UDF.
6) UDF definition does not match actuality.
7) UDF contains extra spaces in field TableID or AliasID in CUFD table.
8) UDF exists but is not defined in CUFD table.

Cause

Application error.

Solution

In order to detect whether this issue affects your database, please run the following queries:

1) UDT is defined but does not exist.
***
```
select TableName from OUTB
where not exists (
   select 1 from sysobjects where xtype='U' and [name]='@'+TableName
)
```
***
2) UDT is not registered.
***
```
select * from sysobjects where [name] like '@%' and name not in
(select '@'+tablename from outb
union all
select '@'+logtable from outb where logtable is not null) and xtype='U'
```
***
3) UDF is defined on an unregistered UDT.
***
```
select T0.TableID from CUFD T0 where left(T0.TableID,1)='@'  and not exists (
select 1 from  OUTB T1 where '@'+T1.TableName = T0.TableID or '@'+T1.LogTable = T0.TableID
)
```
***
4) UDF is defined but does not exist.
***
```
select TableID, AliasID from CUFD where not exists (
select t0.name, t1.name
from sysobjects t0 inner join syscolumns t1
on t0.xtype='U' and t0.id=t1.id
where t0.name=TableID and t1.name='U_'+AliasID
)
```

```
and TableID not in ('BTNT', 'BTNT1', 'OIBT', 'OSRI', 'SRNT', 'SRNT1')
***
5) UDF valid values are defined for non-existing UDF.
select TableId, FieldID from UFD1 T
where not exists (
    select 1 from CUFD where TableId=T.TableId and FieldID=T.FieldID
)
***
6) UDF definition does not match actuality.
***
select T1.UDF, T0.nvarchar_size as 'act_size', T1.nvarchar_size as 'def_size' from (
select T2.name + '.' + T3.name as 'UDF', T3.length/2 as 'nvarchar_size' from sysobjects T2
inner join syscolumns T3 on T2.id=T3.id where T2.xtype='U' and T3.xtype in
(select xtype from systypes where [name]='nvarchar')
) T0
inner join (
select tableid + '.U_' + aliasid as 'UDF', editsize as 'nvarchar_size'
from cufd where typeid='A' and editsize>1
) T1
on T0.UDF=T1.UDF
where T0.nvarchar_size>T1.nvarchar_size
***
7a) UDF contains extra spaces in field TableID in User-fields description CUFD table.
***
select * from CUFD
where  datalength(TableID)<>LEN(TableID)
and  ascii(SUBSTRING (TableID, LEN(TableID)+1, 1)) =32
***
7b) UDF contains extra spaces in field AliasID in User-fields
description CUFD table
***
select * from CUFD
where  datalength(AliasID)<>len(AliasID)
and  ascii(SUBSTRING (AliasID, LEN(AliasID)+1, 1)) =32
***
8) UDF exists but is not defined
***
select T1.name [Table name], T0.name [Column name] from sys.columns T0 join sys.objects T1
on T0.object_id = T1.object_id
left join CUFD  T2 on T2.TableID = T1.name and ('U_' + T2.AliasID) = T0.name
where T1.type = 'U' and T0.name like 'U/_%' escape '/'
and ('U_' + T2.AliasID) is null
and (T0.name !='U_NAME' and T1.name not in ('OUSR', 'AUSR'))
***
```

The solution is provided under the following link:
http://wiki.sdn.sap.com/wiki/pages/viewpage.action?pageId=198741799

By using the update query you agree with liability conditions described
in the following disclaimer:
http://wiki.sdn.sap.com/wiki/display/PEQ/Home
If you do not agree with the disclaimer, please contact the support
organization for further processing of your issue.

Hana select queries attached to the note. Please log a new message in case the attached
query does not work on the current revision of HANA.

Other terms

UDF, UDT, user defined field, user defined table, CULG, Upgrade, inconsistency, the
database structure has been modified,

You can only specify the READPAST lock in the READ COMMITTED or REPEATABLE READ isolation
levels

Header Data

Released On   24.06.2014 11:17:57

Release Status	Released for Customer
Component	SBO-GEN-UDF User-Defined Fields
Other Components	SBO-BC-UPG Upgrade
Priority	Correction with medium priority
Category	Consulting

Validity

Software Component	Version
SAP B1 VERSION FOR SAP HANA	8.82
	9.0
SAP BUSINESS ONE	8.82
	9.0

References

This document refers to:

SAP Business One Notes

1531620	New user defined fileds after upgrade
1056335	Upgrade failure caused by manual user tables
946498	Upgrade fails with reference to UDT in CULG table

This document is referenced by:

SAP Business One Notes (5)

946498	Upgrade fails with reference to UDT in CULG table
1343077	Upgrade Wizard Precheck: user-defined table unique index
1251155	UDFs are not displayed in the form
1531620	New user defined fileds after upgrade
1821938	UDF and UDT Length Inconsistencies

Attachments

File Name	File Size (KB)	Mime Type
UDT_and_UDF_issues_REV_69.txt	3	text/plain