

Ruby - Feature #6613

VT_RECORD, IRecordInfo Support in WIN32OLE

06/21/2012 07:54 AM - dsisnero (Dominic Sisneros)

Status:	Assigned	
Priority:	Normal	
Assignee:	suke (Masaki Suketa)	
Target version:		
Description		
WIN32OLE has no support for VT_RECORD VARIANTS. Python and Perl use the functions GetRecordInfoFromTypeInfo and GetRecordInfoFromGuids to add support for VT_RECORD and the IRecordInfo interface.		
suggest having a class IRecordInfo and support for generating a Class for the UDT to use this Record/Struct in ruby		
The method starting on 1395 needs a case statement for VT_RECORD and a way to turn that into a IRECORD class		
<pre>static void * get_ptr_of_variant(VARIANT *pvar) { switch(V_VT(pvar)) { case VT_UI1: return &V_UI1(pvar); break;</pre>		
The IDL definitions for the methods are as follows		
<pre>HRESULT GetRecordInfoFromTypeInfo(__in ITypeInfo *pTypeInfo, __out IRecordInfo **ppRecInfo); HRESULT GetRecordInfoFromGuids(__in REFGUID rGuidTypeLib, __in ULONG uVerMajor, __in ULONG uVerMinor, __in LCID lcid, __in REFGUID rGuidTypeInfo, __out IRecordInfo **ppRecInfo);</pre>		
here is the CTYPES definition for python that adds this support		
<pre>class IRecordInfo(IUnknown): # C:/vc98/include/OAIDL.H 5974 iid = GUID("{0000002F-0000-0000-C000-000000000046}") def GetFieldNames(self, *args): count = c_ulong() self.__com_GetFieldNames(count, None) array = (BSTR * count.value)() self.__com_GetFieldNames(count, array) result = array[:] # XXX Should SysFreeString the array contents. How to? return result IRecordInfo. methods = [COMMETHOD([], HRESULT, 'RecordInit', (['in'], c_void_p, 'pvNew')), COMMETHOD([], HRESULT, 'RecordClear', (['in'], c_void_p, 'pvExisting')), COMMETHOD([], HRESULT, 'RecordCopy',</pre>		

```
(['in'], c_void_p, 'pvExisting'),
(['in'], c_void_p, 'pvNew')),
COMMETHOD([], HRESULT, 'GetGuid',
(['out'], POINTER(GUID), 'pguid')),
COMMETHOD([], HRESULT, 'GetName',
(['out'], POINTER(BSTR), 'pbnstrName')),
COMMETHOD([], HRESULT, 'GetSize',
(['out'], POINTER(c_ulong), 'pcbSize')),
COMMETHOD([], HRESULT, 'GetTypeInfo',
(['out'], POINTER(POINTER(ITypeInfo)), 'ppTypeInfo')),
COMMETHOD([], HRESULT, 'GetField',
(['in'], c_void_p, 'pvData'),
(['in'], c_wchar_p, 'szFieldName'),
(['out'], POINTER(VARIANT), 'pvarField')),
COMMETHOD([], HRESULT, 'GetFieldNoCopy',
(['in'], c_void_p, 'pvData'),
(['in'], c_wchar_p, 'szFieldName'),
(['out'], POINTER(VARIANT), 'pvarField'),
(['out'], POINTER(c_void_p), 'ppvDataCArray')),
COMMETHOD([], HRESULT, 'PutField',
(['in'], c_ulong, 'wFlags'),
(['in'], c_void_p, 'pvData'),
(['in'], c_wchar_p, 'szFieldName'),
(['in'], POINTER(VARIANT), 'pvarField')),
COMMETHOD([], HRESULT, 'PutFieldNoCopy',
(['in'], c_ulong, 'wFlags'),
(['in'], c_void_p, 'pvData'),
(['in'], c_wchar_p, 'szFieldName'),
(['in'], POINTER(VARIANT), 'pvarField')),
COMMETHOD([], HRESULT, 'GetFieldNames',
(['in', 'out'], POINTER(c_ulong), 'pcNames'),
(['in'], POINTER(BSTR), 'rgBstrNames')),
COMMETHOD([], BOOL, 'IsMatchingType',
(['in'], POINTER(IRecordInfo))),
COMMETHOD([], HRESULT, 'RecordCreate'),
COMMETHOD([], HRESULT, 'RecordCreateCopy',
(['in'], c_void_p, 'pvSource'),
(['out'], POINTER(c_void_p), 'ppvDest')),
COMMETHOD([], HRESULT, 'RecordDestroy',
(['in'], c_void_p, 'pvRecord'))]
```

#####

functions

_oleaut32 = oledll.oleaut32

```
def GetRecordInfoFromTypeInfo(tinfo):
    "Return an IRecordInfo pointer to the UDT described in tinfo"
    ri = POINTER(IRecordInfo)()
    _oleaut32.GetRecordInfoFromTypeInfo(tinfo, byref(ri))
    return ri
```

```
def GetRecordInfoFromGuids(rGuidTypeLib, verMajor, verMinor, lcid,
rGuidTypeInfo):
    ri = POINTER(IRecordInfo)()
    _oleaut32.GetRecordInfoFromGuids(byref(GUID(rGuidTypeLib)),
verMajor, verMinor, lcid,
byref(GUID(rGuidTypeInfo)),
byref(ri))
    return ri
```

History

#1 - 07/14/2012 06:46 PM - nahi (Hiroshi Nakamura)

- Category set to ext

- Status changed from Open to Assigned
- Assignee set to suke (Masaki Suketa)

Suketa-san, would you please comment to it?

#2 - 11/20/2012 11:13 PM - mame (Yusuke Endoh)

- Target version set to 2.6

#3 - 01/30/2014 02:47 AM - dsisnero (Dominic Sisneros)

Still no progress on this?? I wish I knew C better

#4 - 07/31/2014 01:31 PM - suke (Masaki Suketa)

Sorry for waiting too long. I had implemented VT_RECORD / IRecordInterface features.
Try WIN32OLE_RECORD class in ruby-trunk (2.2.0dev revision 47020 or later).

#5 - 12/25/2017 06:15 PM - naruse (Yui NARUSE)

- Target version deleted (2.6)