



# EPC150070

*New EPC available for LANSA V15!*

We recently released a new EPC for LANSA V15. It contains lots of new features and solved problems. This section outlines the new features and solved defects of EPC150070.

The main feature of EPC150070 is the replication of IIS plugin functionality for IBM HTTP Server module, allowing Visual LANSA developers to publish web services without relying on Windows technologies. This enhancement includes URL pattern matching, request processing, and new configuration options for enhanced flexibility and scalability.

## New features

### 1. Replicate web services request handling for IBM Http Apache

Replicate the web services requests handling of the IIS plugin for the IBM HTTP Server (Powered by Apache) for IBMi as an Apache module.

- URL pattern matching.
- Filtering.
- Sending requests to the application server.
- Processing the response from the application server.
- Formatting the response to be sent to the client.

### 2. Support Apache Module Web Services on IASP

Apache Module HTTP threads now run under the configured user profile so that IASP (Independent Auxiliary Storage Pool) can be setup if needed.

## INSIDE THIS ISSUE

EPC150070 .....	1
New features .....	1
Solved defects .....	4
LANSA install fails because of IBMi password rules .....	6
Did you know?.....	10
Show Leading Zero in VL Web.....	10
Composer problems after upgrade Composer on IBMi from V6 to V7.01 ...	12
Visual LANSA Forum .....	14

An auxiliary storage pool (ASP) is one or more physical disk units assigned to the same storage area. ASPs allow you to isolate certain types of objects on specified physical disk units.

There is a special type of ASP called Independent Auxiliary Storage Pools (IASPs). IASPs allow you to move and access the same ASP data on different IBMi servers.

### 3. Web Administrator changes to add Apache Module configuration options

Multi-tier configuration program now shows Apache Module configuration:

```
W30P2901          Configure Apache Module

LANSA System
Program Library . . . . . DCXWEBADM
LANSA Install Root . . . . . LANSAL_dcxwebadm
App Server Images Directory LANSAL_dcxwebadm/webserver/images

-----

Module Startup
LANSA Comms Library . . . . . DCXWEBCOM
User profile . . . . . DCXWEBADM

F3=Exit  F12=Cancel

MA  A 13/036
```

### 4. Runtime Tracing

Add runtime tracing options to IBM i multi-tier configuration program. There is a new menu option to configure Apache Module tracing options.

```
W30P2901          Configure Apache Module Tracing

Trace file name . . . . . lansaweb.log

Trace Categories . . . . .
   General Web Server Ext
   Pages Received from LANSAL
   Data Communications
   Dump Comms Data (Large)

Trace level . . . . .
   Always            Emergency
   Alert             Critical
   Error            Warning
   Notice           Information
   Debug            Debug 1
   Debug 2          Debug 3
   Debug 4          Debug 5

Max Trace Data Size per Entry 4096
Show Timezone . . . . .  Yes  No
Timezone in UTC . . . . .  Yes  No

F3=Exit  F12=Cancel

MA  B 03/033
```

## 5. RDMLX Partition Creation

When creating new RDMLX partition, set default to allow all field types.

## 6. Support provided to extract multiple Bitmaps and/or Icons from the repository

Multiple bitmaps and/or icons can be selected and files uploaded to updated from selected location to update images.

The filename must match the identifier of an existing Bitmap/Icon. Bitmaps must be supplied as .png and icons as .ico.

## Solved defects

- Unselected rows are retrieved when a list row border is clicked.
- DISPLAYPOSITION parameter changes in unexpected ways.
  - Changing the DisplayPosition of a list column causes the DisplayPosition of other list columns to change inconsistently.
- Cannot input values using Dropdownstyle(DropDown) in EPC150060.
- Access violation error occurs when saving the theme.
- VLFBASE/VLFALL import is not ended on EPC150060 environment.
  - The Web API registering function was not ending even though the Web API were correctly being registered.
- List column proportions are not enabled for column header.
- All items are incorrectly selected when a dialog is reshown.
- RDML function which submits CL program using LANSASUBMIT command aborts.
  - Change to append MSGQ(\*USRPRF) parameter to SBMJOB command has been undone.
- Prompting event doesn't fire for the field in PRIM\_MD.ListEdit.
  - Firing of both Prompting and IconClick events on cells of PRIM\_MD.ListEdit was not occurring.
- Several issues with prompter in EPC150060.
  - Value is shown over the prompter MouseOver/Focused color has been changed to light grey.
- List properties "ColumnResize" and "ColumnDrag" not functioning correctly.
- Error when copying a server module in Visual LANSAS.
  - Copying a server module generates an error "Name [new server module name] is not a defined component."
- Dashboard template fails to compile chart server module with custom chart name.
  - Create a new web app from the Dashboard template.  
For View3, change the chart name to your own custom name.  
Generate the app and the Main web page will fail to compile until you replace the default name of the chart server module with your own name.
- When creating Offline Server modules, no js objects are created.
  - The browser console shows a 404.
- Green up and down arrows do not work for Data Model in Server Module.
  - When you define a list of properties, the green up and down arrow buttons are available to move properties up and down. They illuminate correctly depending on whether you select the top, bottom or middle entry but when you press them, the selected property does not move up or down.
- Adding Index Keys from Data Model ribbon server Module (IDE) does nothing.
- Server Module with Data Model in version control causes invalid YAML message.
- Deregister a service worker if it is no longer needed for a web page.
- Unable to Load Offline Data in V15 EPC150060.
  - Corrected errors when using Offline Databases with Data Models with properties using Identifiers.
  - **User Action:** Re-compile of web pages required.
- Runtime error while changing themes dynamically in VL Web.
- IDE crash when deleting a property from the Data Model in a server Module.
- Drag and drop - drag destination can only be towards the top of the column.
  - When dragging items between columns, the items can be dragged into any free area of the column. In EPC150060, the drag destination can only be towards the top of the column.

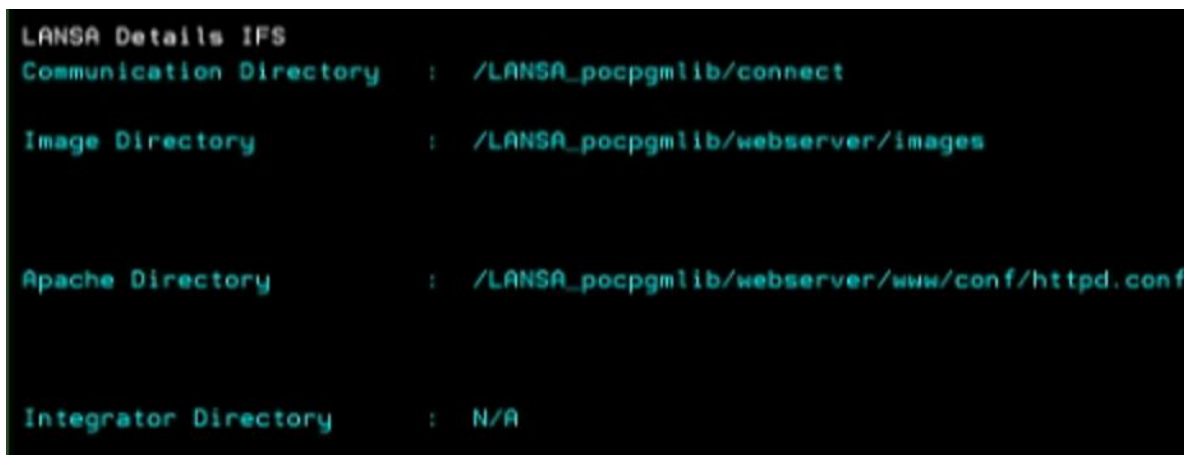
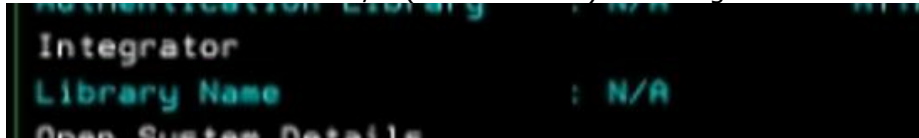
- VLF-Win application created in V13 generates a crash in V15.
- Query ParmS are retained even when the URL is changed to not display them.
- API Wizard generates invalid RDML.
  - This feature is working as designed but self-documentation has been added to the form to explain. Wizard is designed for REST APIs which typically have unique identifies. If user wants to use tables with multiple keys they will need to modify the code to accommodate.
- PRIM\_LIST DragDrop No Longer Works After EPC150060 IBMi Update.
- asNumber and isNumber generating trimming error after applying EPC150060.
- Error "Web API registration services not started" during web api import to iASP.

# LANSAL install fails because of IBMi password rules

## Symptoms

A LANSAL installation on the IBMi appears to be completed successfully, but then it appears via the LANSAL About that the Integrator component is not present (including the Integrator IBMi subsystem).

The LANSAL About shows N/A (not available) for Integrator:



## Cause

The IBMi user profile that LANSAL creates as part of the install, could not be created:

```
To module . . . . . : DC@LOAD30
To procedure . . . . . : DC@LOAD30
Statement . . . . . : 15800
Message . . . . . : Object POCPGMLIB in library QSYS not found.
Cause . . . . . : The object POCPGMLIB in library QSYS type *USRPRF not
found. The object name, library name, or the object type is not correct.
If the library name is not specified, the object may be in a library that is
not contained in the library list. Recovery . . . : Correct the object
name, library name, or object type. If the library name was not specified,
specify the library name and try the request again.
```

And because of this, the install does not continue properly. The creation of the Integrator subsystem for example is an install task after this and will fail.

## Reason

The reason could be related to existing password rules:

Message . . . . : **Password value not valid.** Reason code 2.

Cause . . . . : The specified password value does not conform to the password composition rule \*DGTMIN1 specified by the QPWDRULES system value.

The reason code indicates the problem that was detected with the password value: 1-password does not contain enough letter characters; 2-password does not contain enough digit characters; 3-password does not contain enough special characters; 4-password contains too many letter characters; 5-password contains too many digit characters; 6-password contains too many special characters; 7-password begins with a letter character; 8-password begins with a digit character; 9-password begins with a special character; 10-password ends with a letter character; 11-password ends with a digit character; 12-password ends with a special character; 13-password contains adjacent letter characters; 14-password contains adjacent digit characters; 15-password contains adjacent special characters; 16-password does not contain enough mixed case letter pairs; 17-password does not contain characters from 3 character categories; 18-password contains user profile name; 19-password does not contain enough characters; 20-password contains too many characters; 21-password contains a character used more than once; 22-password contains a character repeated consecutively; 23-same character in same position as previous password. Recovery . . . : Change the password value and try again.

To module . . . . . : DC@LOAD30

To procedure . . . . . : DC@LOAD30

Statement . . . . . : 16306

Message . . . . : **Password does not meet all password rules.**

Cause . . . . : The new password does not meet the password rules specified by the QPWDRULES system value, or one of the programs registered for exit point QIBM\_QSY\_VLD\_PASSWRD, format VLDPO200, has indicated that the password does not meet the installation specific rules. Recovery . . . :

See the messages previously listed in the joblog. Correct the errors. Try

the command again. Technical description . . . . . : An exception was signalled by QSPWDCR that indicates the new password value does not conform to the password composition rules.

The details for the user profile that is created as part of the LANSAs install are listed here:  
[https://docs.lansa.com/15/en/lansa040/index.htm#lansa/insep\\_005.htm](https://docs.lansa.com/15/en/lansa040/index.htm#lansa/insep_005.htm)

The issue with the failing install due to the default password not adhering to customer password restrictions/requirements has been reported before. Actually, it is cropping up more and more as customers migrate to IBM O/S 7.5 and use the:

System value . . . . . : QPWDRULES  
Description . . . . . : Password rules

There is an enhancement logged for the LANSAs install to cater for the QPWDRULES. Unfortunately, the nature of changes to the Install is that they can only be shipped in the next install rather than as a patch or quick fix.

### Solution 1

If possible, change some of the IBMi password rules.

If IBMi system value QPWDRULES = \*PWDSYSVAL  
Change for example the minimum password length to 5 (IBMi system value QPWDMINLEN) and digits required to 0 (IBMi system value QPWDRQDDGT).

If IBMi system value QPWDRULES is not filled with \*PWDSYSVAL:



Remove for example \*MINLEN8 and \*DGTMIN1.

After the install, you can change the value(s) back to its original.



## Solution 2

If solution 1 is not possible check the QPWDRULES first. If it's in place, perform the following workaround:

- Create a user profile on the IBMi called <XXX>PGMLIB with a password that caters for the QPWDRULES rules in place (at least 1 digit, min length of 8, etc.).
- Instigate a LANSAL Install for system <XXX>PGMLIB (which would normally create the same default user profile <XXX>PGMLIB). Set the jobd to <XXX>PGMLIB/<XXX>JOB.
- Check that the install completes successfully and the LANSAL About launches OK and the LANSAL Listener subsystem, JSM subsystem and Web Apache instance (in subsystem QHTTPSVR) all start OK.
- This works because the install will search for an existing profile, including the appropriate password and if it exists, will proceed to use that one, in lieu of creating a new one.



# Did you know?

## Show Leading Zero in VL Web

```
Begin_Com Role(*EXTENDS #PRIM_WEB) Theme(#SYS_THEME<MaterialDesignBlue>)
```

```
Define_Com Class(#PRIM_MD.RaisedButton) Name(#Button) Caption('PRIMARY') Displayposition(1) Left(165)  
Parent(#COM_OWNER) Tabposition(1) Themedrawstyle('MediumTitle') Top(260)
```

```
Define_Com Class(#STD_AMNT.EditField) Name(#STD_AMNT) Displayposition(2) Left(160) Parent(#COM_OWNER)  
Tabposition(2) Top(133)
```

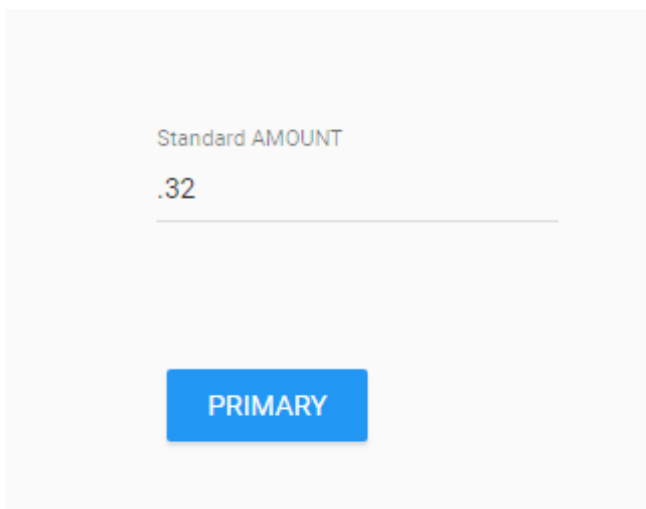
```
Evroutine Handling(#Com_owner.Initialize)
```

```
#STD_AMNT := 0.32
```

```
Endroutine
```

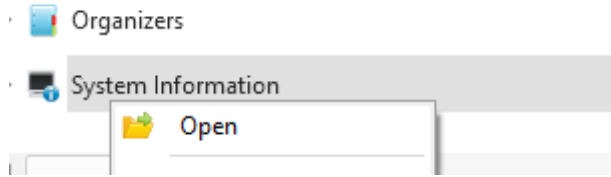
```
End_Com
```

The above will show a screen like this:

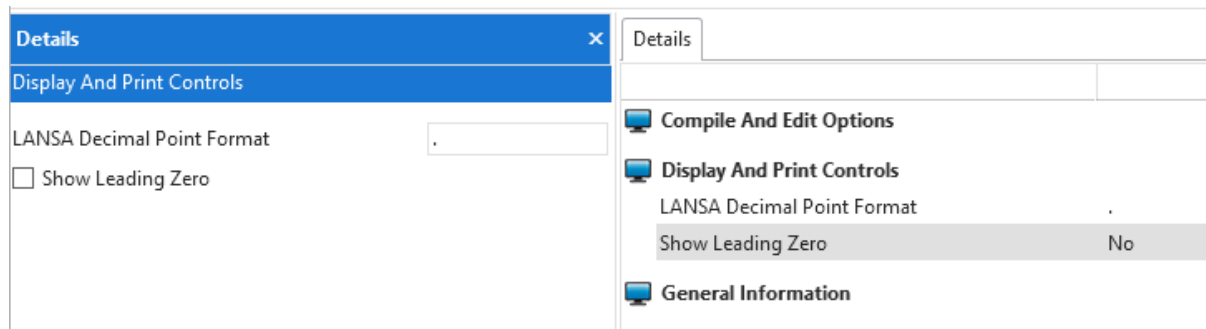


Showing a decimal field that is under 1, hides the leading zero. This is how it works in 5250 but isn't good for the web.

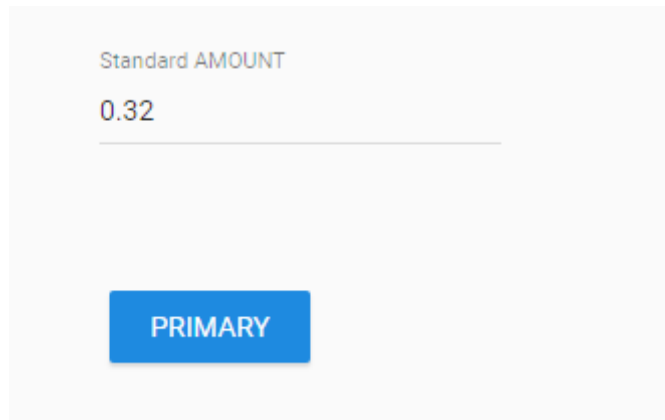
However, there is a simple solution. In the VL LANSA IDE, right click on System Information and click open:



Expand Display and Print Controls and select "Show Leading Zero":



Restart the IDE and recompile the webpage:



# Composer problems after upgrade Composer on IBMi from V6 to V7.01

## Symptoms

After the upgrade to Composer 7 (the upgrade went fine), you start your Composer processing again which may fail with joblog errors like this:

MCH0601 Escape 40 09-06-23 06:02:35.566896 < ingHighUse 001598 U\_BIF992 LICPGMLIB \*STMT

5770SS1 V7R3M0 160422 Job Log S10B0009 09-06-23 06:56:14 EDT Page 4

Job name . . . . . : EDI\_IN User . . . . . : LICPGMLIB Number . . . . . : 792728

Job description . . . . . : LICJOB Library . . . . . : LICPGMLIB

MSGID TYPE SEV DATE TIME FROM PGM LIBRARY INST TO PGM LIBRARY INST

From Program . . . . . : stringHighUse

To module . . . . . : **U\_BIF992**

To procedure . . . . . : DirectoryList

Statement . . . . . : 41

Message . . . . : Space offset X'00000000' or X'0000000000FF29F' is outside current limit for object EDI\_IN LICPGMLIB 792728.

Cause . . . . . : **A program tried to set a space pointer, tried to use storage outside a space, or tried to use an unallocated page in teraspace.**

The space class is X'07'. The space class designates the type of space:  
 00-primary associated space (includes space objects). 01-secondary associated space 0. 02-implicit process space for automatic storage.  
 03-implicit process space for static storage in activation group mark X'0000000000000000'. 04-implicit process space for heap identifier X'00000000' in activation group mark X'0000000000000000'. 05-constant space.  
 06-space for handle-based heap identifier X'00000000'. 07-teraspace offset X'0000000000FF29F'. 08-teraspace for System i5 PASE memory address X'0000000000FF29F'. Offset X'00000000' only applies to storage outside teraspace. X'8000000000000000000000000000FF29F' is a pointer to the teraspace page or the start of the implicit process space for the allocation.

CEE9901 Information 30 09-06-23 06:02:35.700441 DC@P9007 LICPGMLIB \*STMT LANSALICPGMLIB \*STMT

From module . . . . . : DC@P9007

From procedure . . . . . : DC@P9007

Statement . . . . . : 229

To module . . . . . : DC@EN

To procedure . . . . . : DC@EN

Statement . . . . . : 354

Message . . . . : Application error. **MCH0601 unmonitored by U\_BIF992** at statement 000000041, instruction X'0000'.

Cause . . . . . : The application ended abnormally because an exception occurred and was not handled. The name of the program to which the unhandled exception is sent is U\_BIF992 U\_BIF992 DirectoryList. The program was stopped at the high-level language statement number(s) 000000041 at the time the message was sent. If more than one statement number is shown, the program is an optimized ILE program. Optimization does not allow a single statement number to be determined. If \*N is shown as a value, it means the real value was not available. Recovery . . . : See the low level messages previously listed to locate the cause of the exception. Correct any errors, and then try the request again.

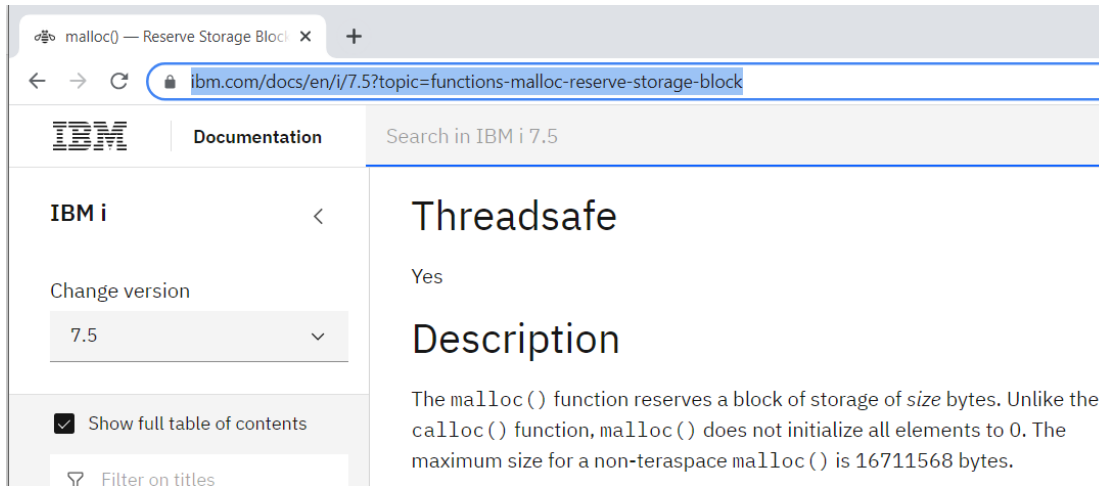


## Cause

When you do things with the iSeries IFS, there is a limit on the number of files that may be in a directory, depending on available memory to allocate.

So this is not a LANSAs limit, this is an iSeries limit. Have a look at this page for the description of the limit:

<https://www.ibm.com/docs/en/i/7.5?topic=functions-malloc-reserve-storage-block>



Now, both Composer 6 and Composer 7 have to do with this limit.

To explain why we don't have this "limit" issue in Composer 6 and we do have this in Composer 7.....

Composer 6 uses in the background LANSAs V13 SP2. LANSAs Composer 7 uses in the background LANSAs V14 SP2. An EDI solution that you have is doing things with the iSeries IFS. It receives files in a folder and moves files to other folders, etc. Doing this, it uses in the background a LANSAs functionality called OV\_FILE\_SERVICE. With the OV\_FILE\_SERVICE you can for example remove a file from a "From directory" to a "To directory". The length of this parameter (the size of the buffer that the file information is stored in) was increased in size between V13SP2 and V14SP2 from at least 227 bytes to at least 862 bytes (padding bytes not calculated).

In the joblog that we investigated is a number in the message - FFF29F = 16,773,791, which is likely to be the amount of memory being requested. If so, it indicates that the error occurs at around the 19,459 file mark.

So.....

"Because the allowed path is longer, the buffer used by that is longer and therefore less files can be accommodated."

With a quick calculation :-)......

To be exact : the File limit was always there, but now has been reduced from around 58000 to around 19500 because of the change in the storage of the filenames (including path ) which was increased from 66 characters to 256 characters (full pathname).

## Solution

You should add new functionality to have the number of files limited on your IFS. You can probably create a program that runs daily via the iSeries job scheduler that will do the clean-up (for example delete or remove files older than a specific date).

# Visual LANSA Forum

The Visual LANSA Forum is gaining membership and popularity!  
<https://forum.developer.lansa.com/index.php>

Membership is free and easy.

Join in to find out more about Visual LANSA related:





- "Questions & Answers"
- "Tips and Techniques"
- "Suggestions for Product Enhancements"
- "Product Announcements"


Visual LANSA

**Visual LANSA Forum**  
Community Forum for Visual LANSA

☰ Quick links [FAQ](#)

🏠 [Visual LANSA Forum](#) < [Board index](#)

VISUAL LANSA	TOPICS	POSTS
 <p><b>Questions &amp; Answers</b> This Q&amp;A forum allows users to post and respond to "How Do I Do ...." questions. Please do not use to report (suspected) errors - you must use your regional help desk for this. The information contained in this forum has not been validated by LANSA and, as such, LANSA cannot guarantee the accuracy of the information.</p>	1743	7331
 <p><b>Tips and Techniques</b> This forum allows developers to post programming tips and coding techniques that may be useful to other Visual LANSA developers. The information contained in this forum has not been validated by LANSA and, as such, LANSA cannot guarantee the accuracy of the information.</p>	101	266
 <p><b>Suggestions for Product Enhancements</b> Please log all suggestions for improvements and enhancements to Visual LANSA here. Entries may be acknowledged and may be added to the list for possible inclusion in later releases of Visual LANSA.</p>	60	146
 <p><b>Product Announcements</b> Read-only forum. Used to announce new releases of LANSA.</p>	33	33