New VLF version

Just in case you haven't heard: some month ago, we released new VLF (Visual LANSA Framework) version. It contains lots of new features. This section outlines new features in the EPC142011 version of the Framework.

Custom Themes for VLF-ONE Applications

Previously a VLF-ONE VF_SY170O theme object was bound to a shipped VL-WEB theme in the VLWebApplicationTheme property. This meant that only shipped VL-Web themes could be used in VLF-ONE applications.

The new UseCustomApplicationTheme property now allows a VLF-ONE theme to be associated with a custom VL-Web theme.

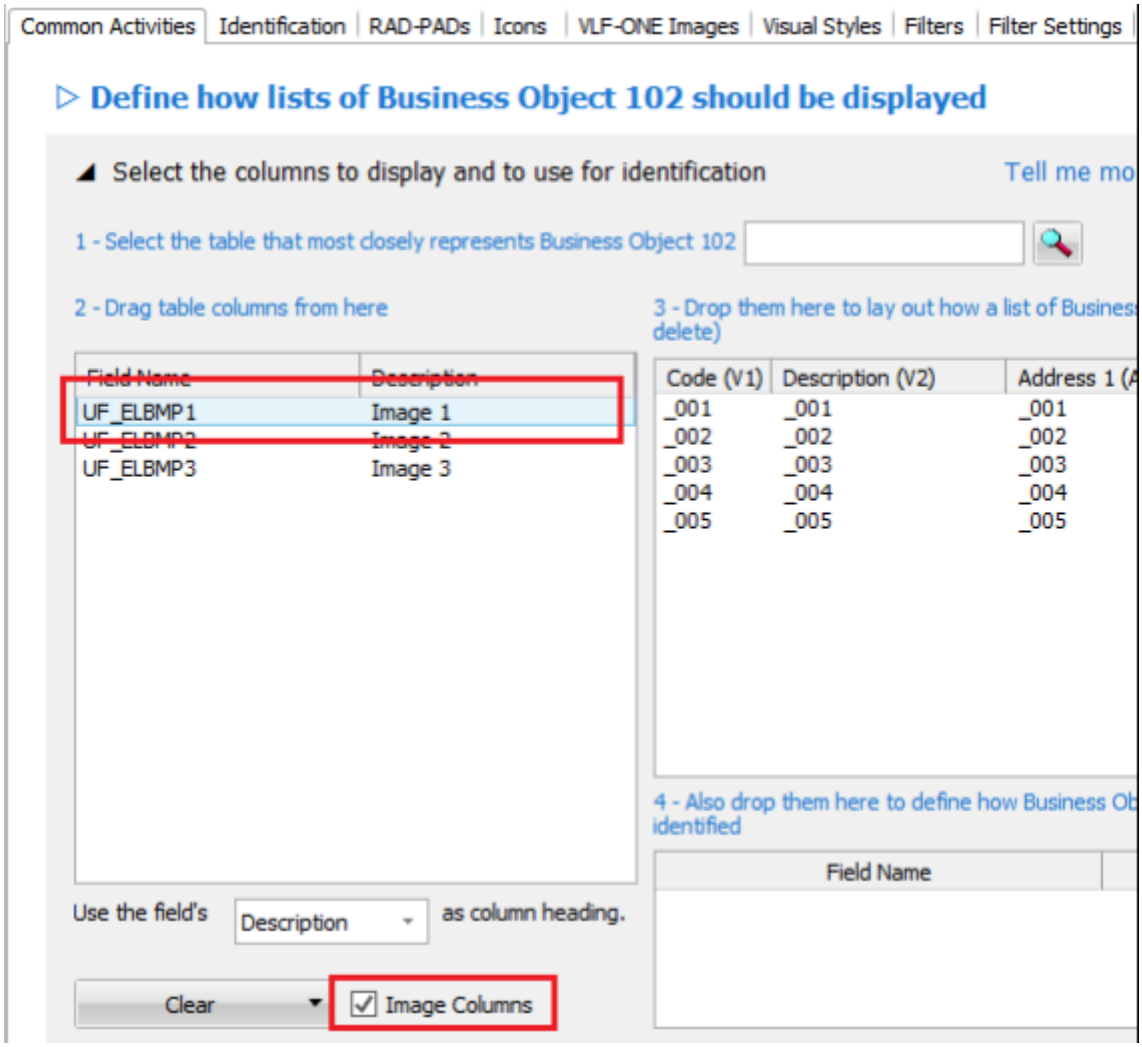
Images Columns in VLF-ONE

If your Framework is a VLF-ONE *only* application, you can add image columns to the instance list for a business object, so that it looks something like this:

Status One	Status 2	Identification	Title	Surname	Given Names
	✗	143153	Ms	Sanford	Chantale
	✓	129210	Miss	Sanford	Karyn
	✗	151576	Ms	Santiago	Karly
	✓	150779	Mr	Shepherd	Lane
	✗	157080	Ms	Sheppard	Virginia

INSIDE THIS ISSUE

To add image columns, check the Image Columns checkbox when editing the instance list, and drag one of the image fields over to the instance list:

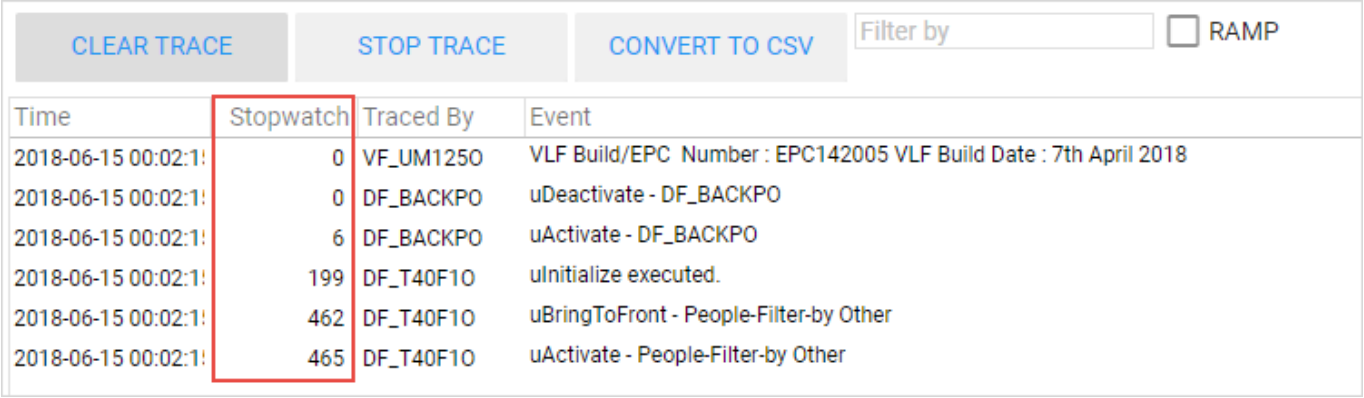


<u>Then, in your filter, add the images like this:</u>

- First define a PRIM_BMP object:
  ```
  Define_Com Class(#prim_BMP) Name(#uImageEmployee) Reference(*DYNAMIC)
  ```
- Then create the image, either from an image file on the webserver, or from a blob field:
  ```
  #uImageEmployee <= #SYS_APPLN.CreateBitmap( VLFONE/Images/other/cross.png )
  ```
  OR
  ```
  #uImageEmployee <= #SYS_APPLN.CreateBitmap( #xEmployeeImageThumbnail )
  ```
- Then add the image to the instance list:
  ```
  #AVLISTMANAGER.AddtoList Visualid1(#xEmployeeIdentification) Visualid2(#xEmployeeTitle)
  ... Icolumn1(#uImageEmployee)
  ```

Stopwatch Times in VLF-ONE Traces

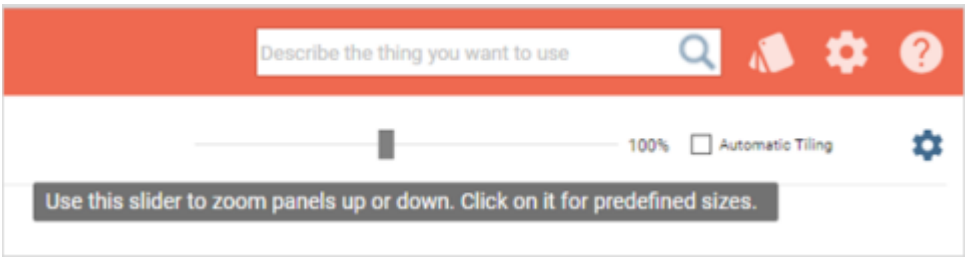
Stopwatch times make it easier to track how long things take to happen.
The times are shown in milliseconds.



Time	Stopwatch	Traced By	Event
2018-06-15 00:02:1	0	VF_UM125O	VLF Build/EPC Number : EPC142005 VLF Build Date : 7th April 2018
2018-06-15 00:02:1	0	DF_BACKPO	uDeactivate - DF_BACKPO
2018-06-15 00:02:1	6	DF_BACKPO	uActivate - DF_BACKPO
2018-06-15 00:02:1	199	DF_T40F1O	uInitialize executed.
2018-06-15 00:02:1	462	DF_T40F1O	uBringToFront - People-Filter-by Other
2018-06-15 00:02:1	465	DF_T40F1O	uActivate - People-Filter-by Other

Zoom Slider in Material Desktop Mode

The Windows style slider that allows panel size to be zoomed up and down is now available in Material Design desktop mode:



If you don't want the slider to appear, you can turn it off using the User Capability Control Options.

Enhanced Snap-in Prompters

Prompting when snapping in VLF-ONE and VLF-WIN command handlers and filters now lists filters and command handlers that have a second level ancestor of VF_AC007/O or VF_AC010/O.

This enhancement is for customers who use their own common ancestor for their command handlers or filters.

Customizable Filter Borders

The VF_SY170O theme object now exposes these properties for your theme customizer to alter as required:

```
* ------------------------------------------------------------------------------

Define_Com Class(#Prim_vs.Style) Name(#Filter_BorderTop) Bordertop(1)
Define_Pty Name(Filter_BorderTop) Get(*REFERENCE #Filter_BorderTop)

Define_Com Class(#Prim_vs.Style) Name(#Filter_BorderLeft) Borderleft(1)
Define_Pty Name(Filter_BorderLeft) Get(*REFERENCE #Filter_BorderLeft)

Define_Com Class(#Prim_vs.Style) Name(#Filter_BorderBottom) Borderbottom(1)
Define_Pty Name(Filter_BorderBottom) Get(*REFERENCE #Filter_BorderBottom)

Define_Com Class(#Prim_vs.Style) Name(#Filter_BorderRight) Borderright(1)
Define_Pty Name(Filter_BorderRight) Get(*REFERENCE #Filter_BorderRight)
```

Event Recording

This EPC includes some basic components of an event recording system.

The components can be used as part of a customer's own system for tracking user movements through a VLF-ONE application to, for instance, improve the design of the VLF-ONE application, or for auditing user actions.

You can, for example, add code into your server modules, filters and command handlers to write event data and store it on a database table on the server.

The components are not suitable for building on at this stage (as they may change), but if you want to experiment with them you can request details through LANSA support.

Dynamic Control of Instance List Column Visibility

Instance List Column Visibility can be set at run time using *avListManager.avSetColumnVisibility.*

For example this statement will make instance list column Visual ID2 invisible:

```
#AVLISTMANAGER.avSetColumnVisibility Ucolumntype(V) Ucolumninstance(2) Uvisible(False)
```

Changes to Hidden Commands in VLF-ONE

Hidden commands no longer cause any kind of busy state to be displayed because they are by definition hidden.

Framework level hidden commands no longer cause the Framework main panel/tab to be displayed when they are executed.

Automatically Create a Single Command Handler Business Object

This new common activities option rearranges the business object so that it has no instance list or filters - just a single command handler. This command is the default command, so it is displayed as soon as the business object is displayed.

- A skeleton command handler and server module are created, so if you want, you can modify them to do what you need.
- Or you can snap in a different command handler if you already have a command handler that you want to display on its own.
- Or you can attach a RAMP destination to the command (which will replace the skeleton command handler).

Warning: When you use this option, all pre-existing filters and commands for the business object will be deleted.

Typical cases where you might want to do this are:

1. You want to switch the user to a new business object, pass it identifying data, and have the command display without any further user interaction.

2. The command handler has its own search logic and does not need a filter or instance list.

3. No search or select is required and you want navigation to be as simple as possible for the user - e.g. display a company website.

4. You want an unmanaged RAMP session to appear in its own business object:

    - Create the business object using the instant prototyping assistant.
    - Use this Common Activity to make the business object into a single command business object.
    - In RAMP tools, set up and choreograph your unmanaged session destination, and then attach the destination to the single command in the business object.

Control What the User Can Do

You can limit what a user can do by setting user capability control properties at Framework startup. Typically, you do this in your system's IIP (similar to the shipped example DF_OSYSTM).

You might set these options from custom properties associated with the user, or any other logic. For example, this line prevents the current user from using the panel zoom feature:

```
#AVFRAMEWORKMANAGER.avUserCapability.AllowPanelZooming := False
```

The controllable user capabilities are:

AllowMaximizePanel	Allow panels to be maximized.
AllowMinimizePanel	Allow panels to be minimized.
AllowSettingsPanel	Allow the settings option on panels.
AllowBusinessObjectSettingsMenu	Allow the settings option on the business object bar.
AllowClosePanel	Allow panels to be closed.
AllowMovePanel	Allow panels to be moved.
AllowSizeFilters	Allow filters to be resized.
AllowSizeCommandhandlers	Allow command handlers to be resized.
ShowSingleObjects	Show a single business object at a time. This property should only be set to True when LockAutoTilingOn is also set to True.
LockAutoTilingOn	Lock auto tiling on. The auto-tile check box is invisible.
LockAutoTilingOff	Lock auto tiling off. The auto-tile check box is invisible.
AllowPanelZooming	Allow panels to be zoomed.
OverrideOpenBusinessObjectInstances	Override how many business object instance can be concurrently open.

Typically, these options are used to limit the options a new user has.

For example setting OverrideOpenBusinessObjectInstances := 1 prevents the user from opening multiple business object instances, even though the Framework definition has the open limit set to 5.

Equally, using LockAutoTilingOn := True and ShowSingleObjects := True produces a 'full screen' version of the VLF-ONE Framework which acts more like traditional and simpler web interfaces.

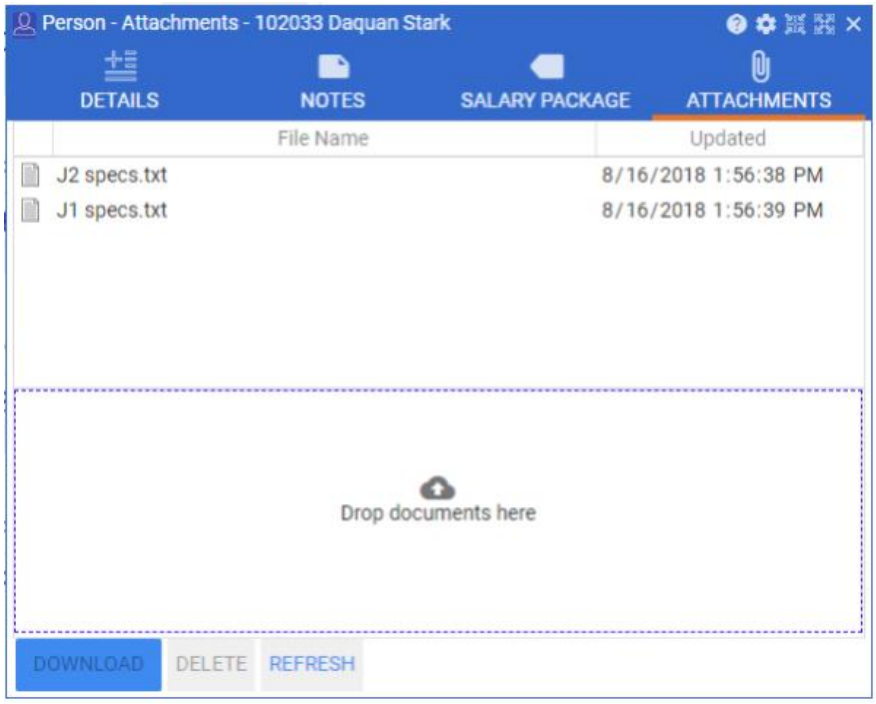
Note: Unless otherwise indicated, you should only enable these user capability control options when executing in *desktop* mode. Enabling these options in phone or tablet mode is not supported and may cause unpredictable results.

Document Storage Examples

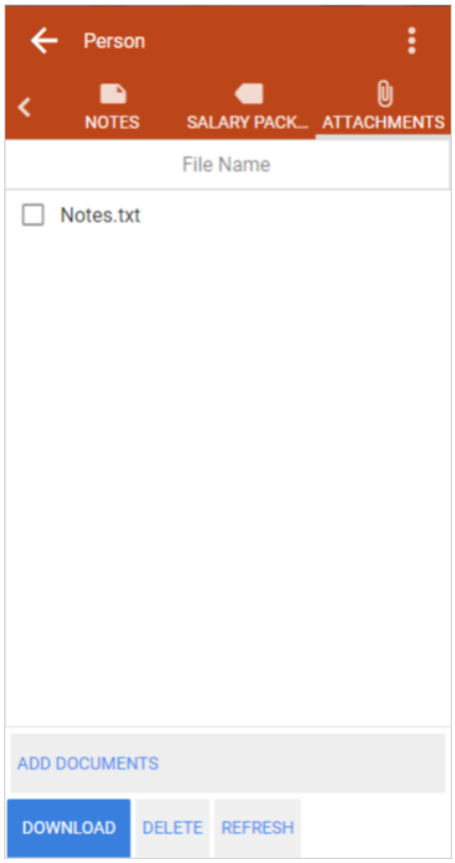
Examples of document storage command handlers have been added to the shipped demonstration Framework.

See the Attachments tab for the People business object in Resources for an example.

If VLF-ONE is running in desktop mode, the handler DF_DOC_Desktop is displayed, and the user can automatically upload and store files in database table DFDOC2 using drag-and-drop. Individual files can also be downloaded from the database table by selecting them in the list.

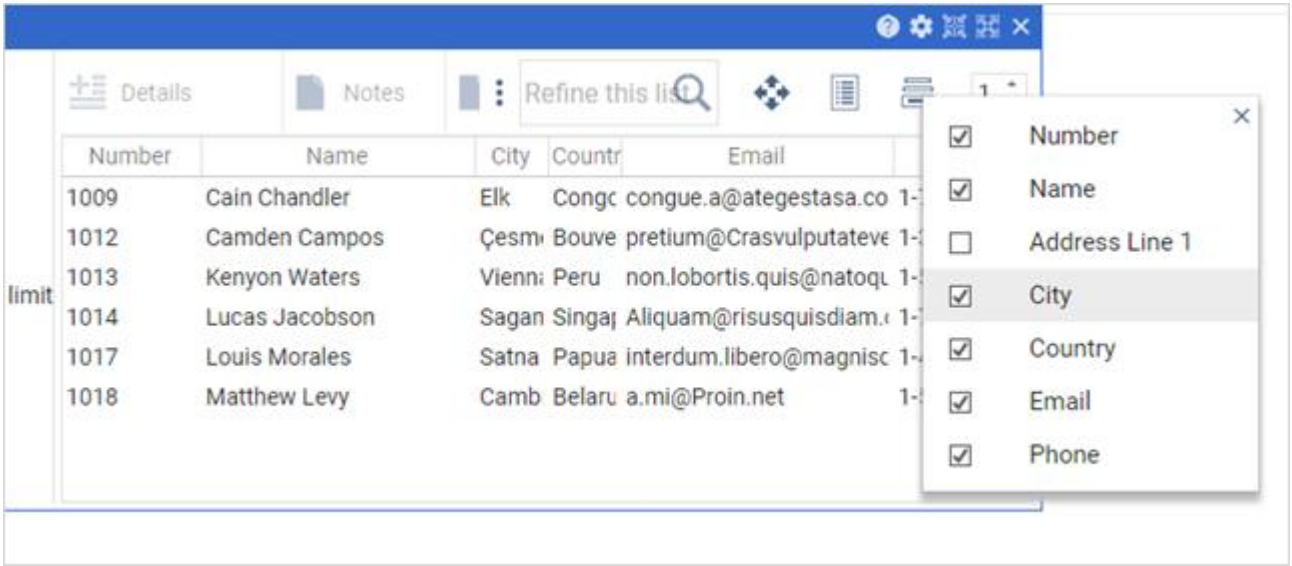


If VLF-ONE is running on a mobile device (small or medium screen), the handler DF_DOC_Mobile is displayed, and the user can upload files by touching the *ADD DOCUMENTS* button.



Improved Column Selection Menu in Instance List

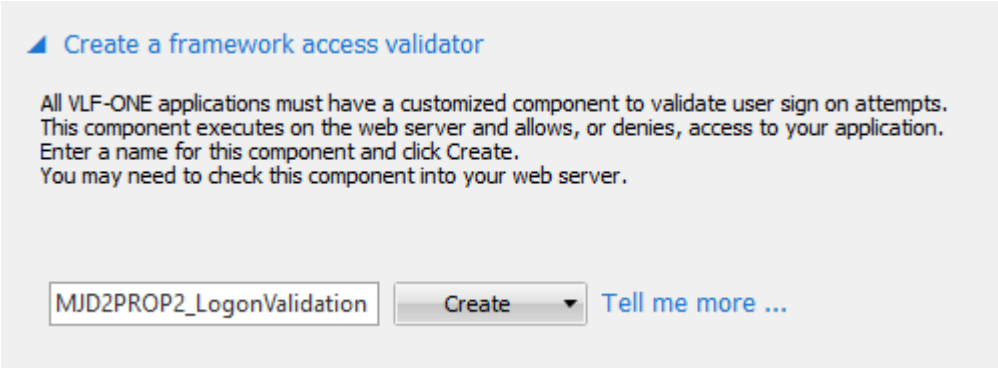
The instance list column selection menu now stays up while the user selects and deselects columns. When the user is finished, there is an option to close the menu.



New Common Activities

1. Generate Code to Validate Windows Domain Users

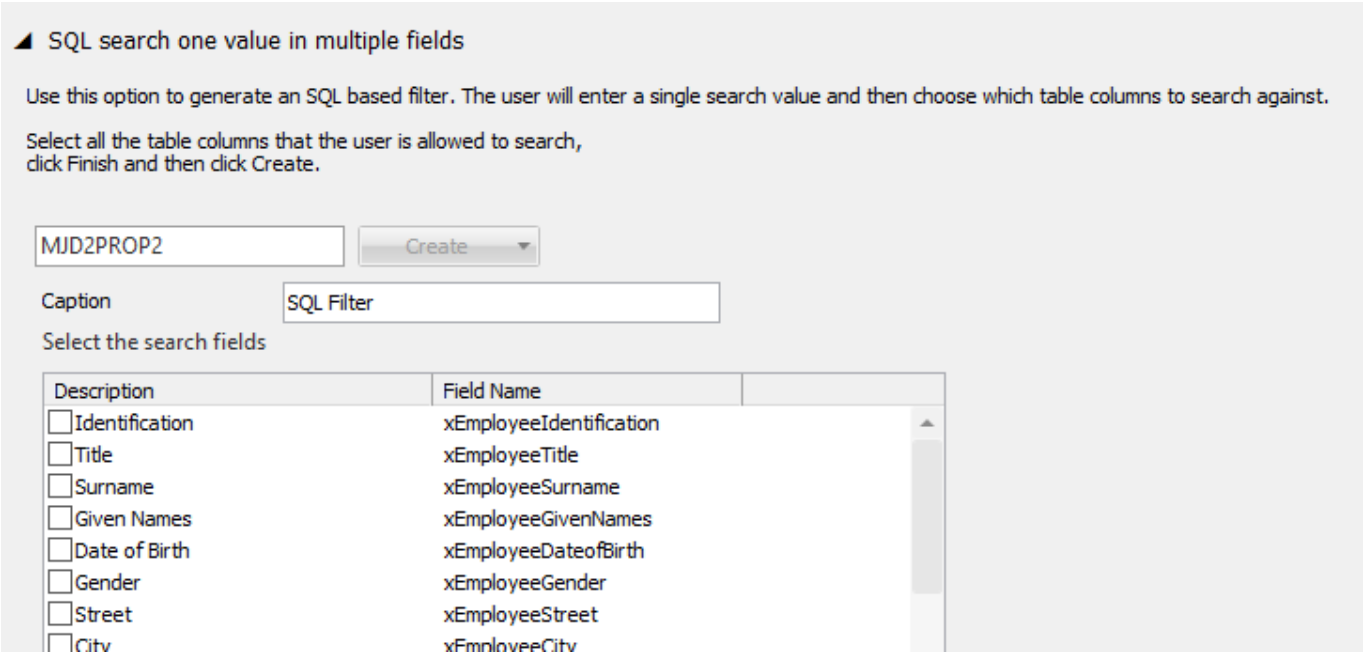
This Common Activities option creates a Framework access validator component.



The generated access validation logic includes commented out code showing how to validate Windows domain users.

2. Generate SQL Based Searches

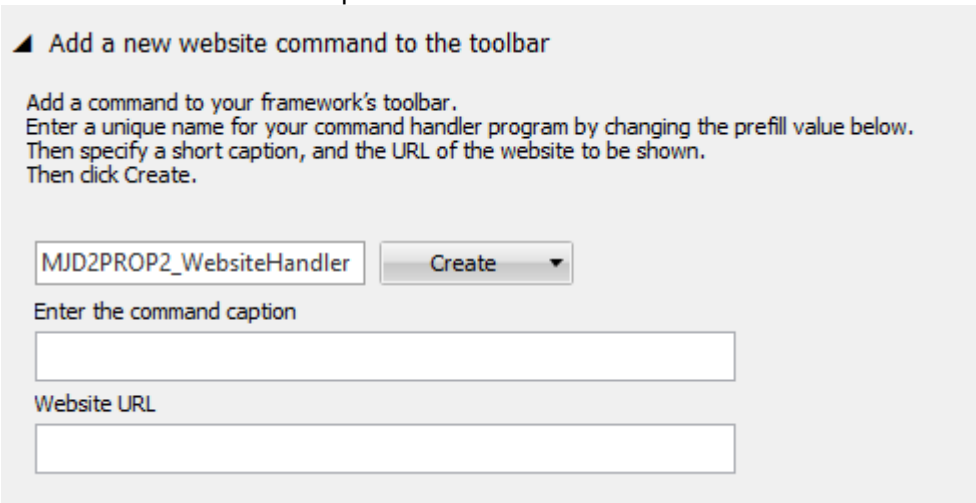
This Common Activities option generates an SQL based filter based on the chosen table columns.



The logic supports multiple OR operations for one search field. For example, Search for "Smith" in Surname, Given Names and Address Line 1.

3. Add a Website

This Common Activities option adds a website command to the toolbar on the VLF-ONE home page.



ActiveX crash in Visual LANSA editor after applying Windows 10 update

If you are using ActiveX and experiencing a crash while trying the scenario below, then you need to make a small change in your windows registry to avoid the crash.

Scenario

- Create a new ActiveX component.
- Try to set the "ProgId" parameter from “Details” tab by clicking on "ProgId" prompter.
- The IDE crashes trying to load the prompter and the list of ProgIds.

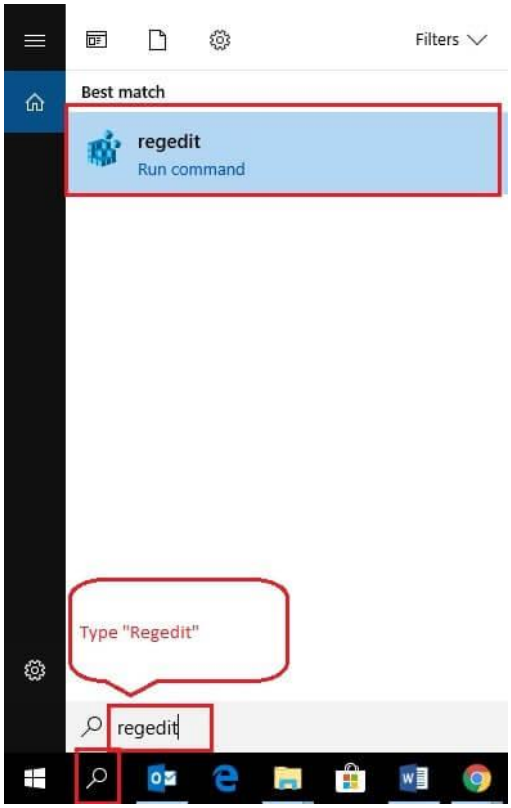
Cause

The problem is due to a non-standard key in the registry related to “Microsoft 3D viewer”. Windows update is installing this during updates to 3D Paint and other 3D related applications.

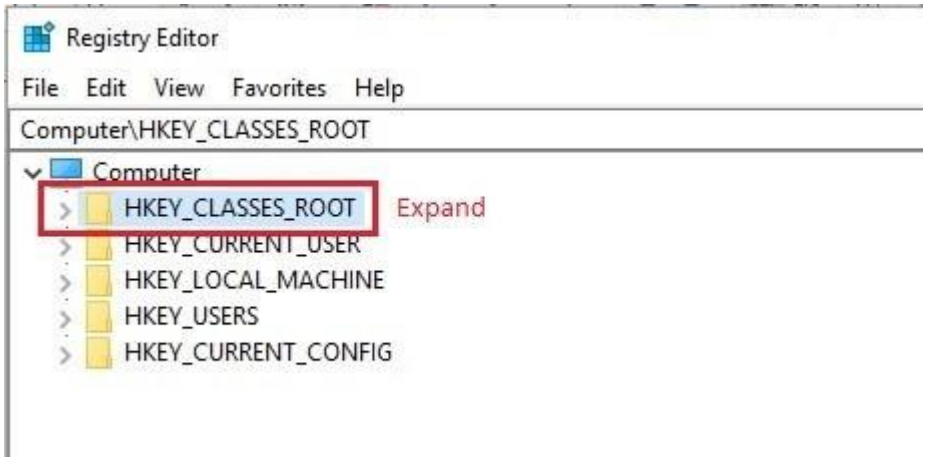
Removing this errant key does not disable the use of the 3D viewer and it will not damage your system, however the key may get re-enabled in future Windows updates. When this happens, you will need to re-do the steps below.

Workaround

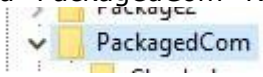
Open "regedit"



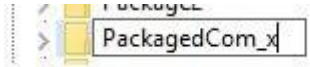
Expand "HKEY_CLASSES_ROOT"



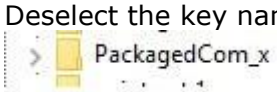
Find "PackagedCom" Key



Select it and Press F2 on the key name to rename. Put an "_x" at the end of key.



Deselect the key name by clicking somewhere else (on white space for example)



Close regedit and go back to IDE.

ActiveX loading "ProgId" should complete without any error.

Troubleshooting common SQL Server errors and return codes

This page lists some common SQL Server errors that you might encounter when installing or using Visual LANSA and steps to resolve the issues.

Error 1

Unable to install Microsoft Visual C++ 2015 Redistributable because Microsoft Visual C++ 2017 is already installed.

Diagnosis

Open Summary.txt. This file is located in %ProgramFiles%\Microsoft SQL Server\140\Setup Bootstrap\Log. The following indicates the key values to look for.

"Overall Summary" section (usually located towards the top of the file)
Final Result: Failed
Exit code (Decimal): A non-zero value

"Detailed results" section (usually located towards the bottom of the file)
Status: Failed
Reason for failure: An error occurred for a dependency of the feature causing the setup process for the feature to fail.
Component name: Microsoft Visual C++ 2015 Redistributable
Component error code: 1638
Error description: VS Shell installation has failed with exit code 1638.

Solution

1. Uninstall the Microsoft Visual C++ 2017 Redistributable (x86) and (x64).
2. Install SQL Server.
3. Reinstall the Microsoft Visual C++ 2017 Redistributable (x86) and (x64)
   The Redistributable may be found on Microsoft's website. The location at time of writing was https://visualstudio.microsoft.com/downloads/

Error 2

System administrator ("sa") password does not meet strong password requirements.

Diagnosis

Open Summary.txt. This file is located in %ProgramFiles%\Microsoft SQL Server\140\Setup Bootstrap\Log. The following indicates the key values to look for.

"Overall Summary" section (usually located towards the top of the file)
Final Result: Failed
Exit code (Decimal): A non-zero value
Exit message: The specified sa password does not meet strong password requirements. For more information about strong password requirements, see "Database Engine Configuration - Account Provisioning" in Setup Help or in %SQL_PRODUCT_SHORT_NAME% Books Online.

Solution

Rerun the Visual LANSA install and specify a stronger password. The "sa" password may be specified by clicking the "Optional Parameters" button next to the database instance on the Database panel. Check with your network administrator to establish if there is a strong password policy enforced at the network (domain) level.

UPDATED: Java compliance - impacts on LANSA

Date: 11 January 2017, Updated: 23 October 2018

Updated Compliance Statement

Further to our original compliance statement below, the latest update from LANSA is that Oracle have continued to progress their Java SE compliance and have announced the End of Public Updates for Oracle JDK 8.

Refer to the following Overview page for details:
https://www.oracle.com/technetwork/java/javase/overview/index.html
This page contains a link to the Oracle Java SE Support Roadmap
https://www.oracle.com/technetwork/java/javase/eol-135779.html

LANSA customers who do not want commercial support or enterprise management tools (*) can instead use Oracle's OpenJDK 8 build.
Oracle recommends that those choosing not to renew Java SE instead transition to OpenJDK 8 binaries from the company, before their subscription ends. Doing so will let users keep running applications uninterrupted.
(*) LANSA products do not require enterprise management tools.

The Java SE changes from Oracle have the potential to impact LANSA customers. LANSA will provide the following product updates:

V14 SP2

- LANSA will provide a new V14 SP2 DVD spin that ships OpenJDK 8. Installing LANSA V14 SP2 from this spin will install and configure OpenJDK 8 for use with LANSA Integrator.
- After installing from this spin, LANSA deployments will also incorporate OpenJDK 8 when LANSA Integrator is deployed.

Note: LANSA Composer V7.0 will also ship with OpenJDK 8 on the client and server.

V13 SP2

- LANSA Integrator at V13 SP2 level will also be affected by the Oracle Java SE changes.
- There are no plans to provide a new DVD image for V13 SP2.
- LANSA customers installing V13 SP2 will be required to download and install OpenJDK 8 or Oracle JDK 8 themselves.
- LANSA will provide detailed instructions for the changes required for V13 SP2 to continue to work with OpenJDK 8.

Original Compliance Statement

Oracle is approaching Java customer and partners which it claims are out of compliance on Java. There are many articles online explaining the development but the following is an extract from one such article on The Register
http://www.theregister.co.uk/2016/12/16/oracle_targets_java_users_non_compliance/

Java SE is free but Java SE Advanced Desktop, Advanced and Suite are not. Java SE Suite, for example, costs $300 per named user with a support bill of $66; there's a per-processor option of $15,000 with a $3,300 support bill. Java SE comes with the free JDK and JRE, but Advanced Desktop, Advanced and Suite layer in additional capabilities such as Java Mission Control and Flight Recorder also known as JRockit Mission Control and JRockit Flight Recorder.

What does this mean for LANSA?

- On Windows, customers are required to download Java SE, if they do not already have a supported Java version installed, when they install Visual LANSA.
- On IBM I, Java is provided as a licensed IBM product.
- Using LANSA Integrator, there is not a requirement for the Advanced Desktop, Advanced or Suite layers. LANSA customers use the JRE to run LANSA Integrator services. LANSA customers use the JDK for Integrator Studio usage. Both of these are free and therefore not affected by the compliance question.

EPC Information

EPCs are Expedited Program Changes that contain fixes and enhancement to LANSA products. It is recommended to be at the latest EPC level to ensure that you have all the most recent fixes, features and enhancements.

EPC - 142040

Date: 22 January 2019

EPC142040 for LANSA V14 SP2

This EPC includes the following highlights:

- All the latest fixes and enhancements for the Deployment Tool.
- Fix up where controls marked as "not visible" still showed on the IDE designer.
- Various other fixes and enhancements, as well as all patches and hotfixes shipped since EPC142030.

EPC - 142030

Date: 27 November 2018

EPC142030 for LANSA V14 SP2

This EPC includes the following highlights:

- Material Design Controls have been added to Visual LANSA in this EPC. On the LANSA Editor Home page, take the option to Explore the Material Design Controls. This launches a web page explaining the Material Design (MD) implementation, the MD controls available and examples of how each control works.
- Improved templates for getting started with web applications with the addition of 4 new templates to help developers get started with building responsive Web Applications.
  These templates introduce the concept of Home / Dashboard and use the enhanced Theme capabilities of defining your own color palette.
- Various VCS fixes and enhancements for improved productivity.
- IDE performance and stability improvements.
- Various other fixes and enhancements, as well as all patches and hotfixes shipped since EPC142010.

EPC - 142020

Date: 24 August 2018 (*this EPC is superseded by EPC142030*)

EPC142020 for LANSA V14 SP2

This EPC includes the following highlights:
A Visual LANSA change required for a Visual LANSA Framework (VLF) enhancement shipped in VLF EPC142011.
All patches and hotfixes shipped since V14 SP2 EPC142010.
A new system variable *GUIDSEQUENTIAL that allows a sequential GUID to be generated.
The addition of a properties screen for Versions and Patches in the Deployment Tool.

EPC - 142010

Date: 31 July 2018

EPC142010 for LANSA V14 SP2

This EPC includes the following highlights:

- A fix for the dongle not being recognised after applying Windows 10 Update 1803 as mentioned in the V14 Late Breaking News page.
- An enhancement whereby the IDE displays a warning message when your development license is about to expire.
- Web performance improvements and changed Web configuration settings that are optimized for WAMs and Server Modules.
- Various enhancements and improvements to the shipped samples and examples.
- All patches and hotfixes shipped since V14 SP2 GA.

LANSA V14 SP2 Spin0337

LANSA V14 SP2 Spin0337 (V14 SP2 with all EPCs) is available!

With the recent release of EPC142030, a new spin of V14 SP2 is available which installs (or upgrade to) V14 SP2 and automatically apply all available EPCs up to EPC142030. The EPCs that are applied are EPC142010, EPC142030 (containing EPC142020) and VLF EPC142011. This new spin0337 is now available.

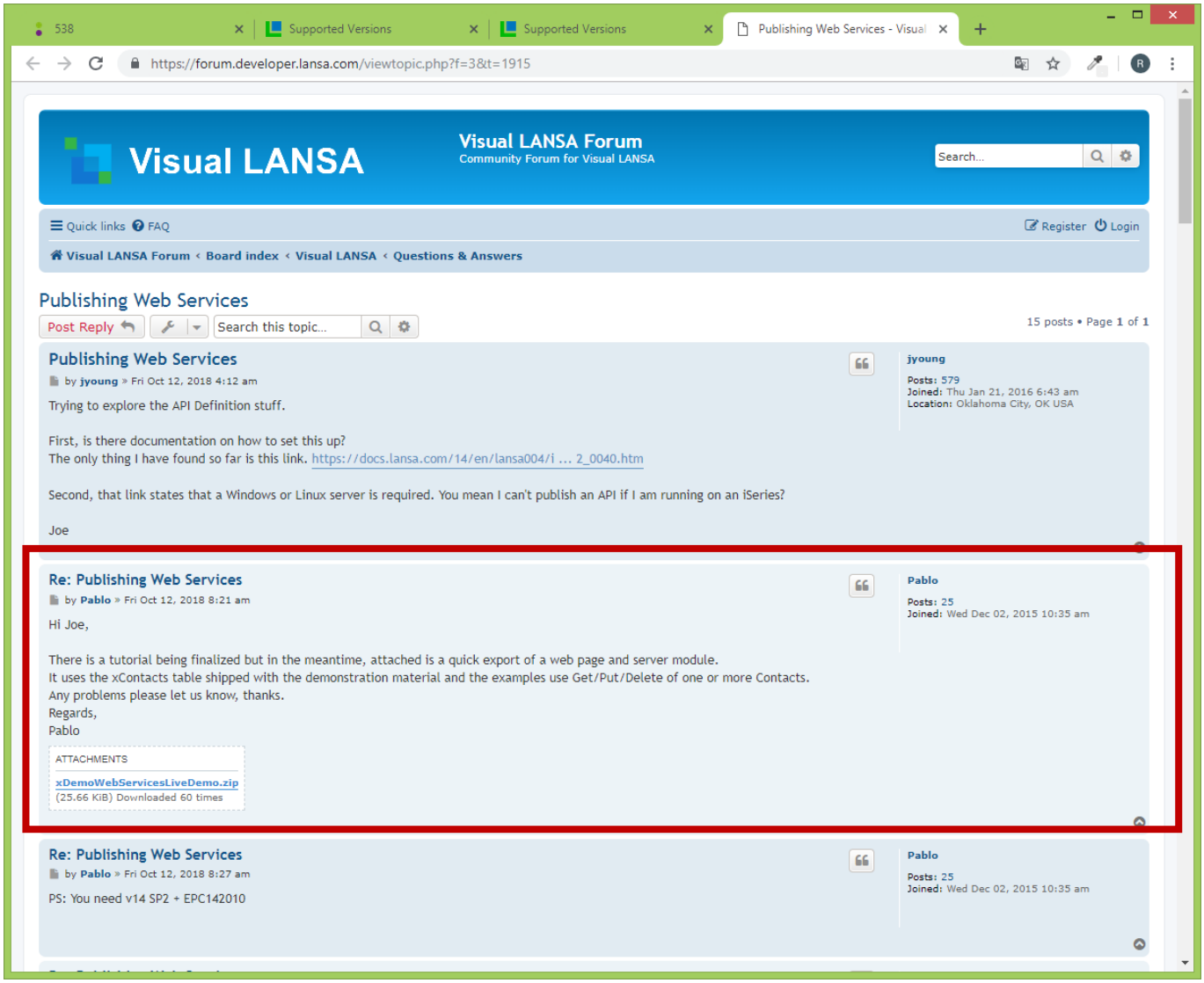
Functionality wise, installing (or upgrading) with spin0337 is the exact equivalent of installing V14 SP2 and manually applying all EPCs up to EPC142030. However, spin0337 also contains several install changes, including:

- OpenJDK V8 is shipped and will be installed and LANSA Integrator configured to use it, as detailed in https://www.lansa.com/support/tips/t0640.htm
- Sentinel Hardware key drivers are no longer automatically installed.
- Various Visual LANSA V14 SP2 install improvements.

If you are interested in this Spin0337, please contact your local LANSA vendor!

Publish Web Service Demo

There is a Publish Web Service demo available via the Visual LANSA Forum:
https://forum.developer.lansa.com/viewtopic.php?f=3&t=1915



The demo is available via a quick export of a web page and server module. It uses the xContacts table shipped with the demonstration material and the examples use Get/Put/Delete of one or more Contacts.

You must use a mixed multi-tier setup with Windows or Linux as the web server to an IBM i backend D/A server. Using an IIS web server (for example) will work OK and has been tested.

The V14 SP2 documentation contains the following:
https://docs.lansa.com/14/en/lansa004/i ... s%7C 2

Publish RESTful Web Services
LANSA developers can now develop RESTful web services using RDML. ***A Windows or a Linux web server is required.***

Mixed Multi-Tier – Windows Web Server setup

It is possible to use a Windows web server to an IBM i Data Application Server. This is called a mixed multi-tier setup. For further details, refer to *Considerations for Multi-Tier Deployment Models*.

You may need to use this setup due to company policies or other reasons. One reason for a mixed multi-tier setup is if you wish to use the Publish RESTful Web Services enhancement, introduced in V14 SP2. This feature requires a Windows or Linux web server.

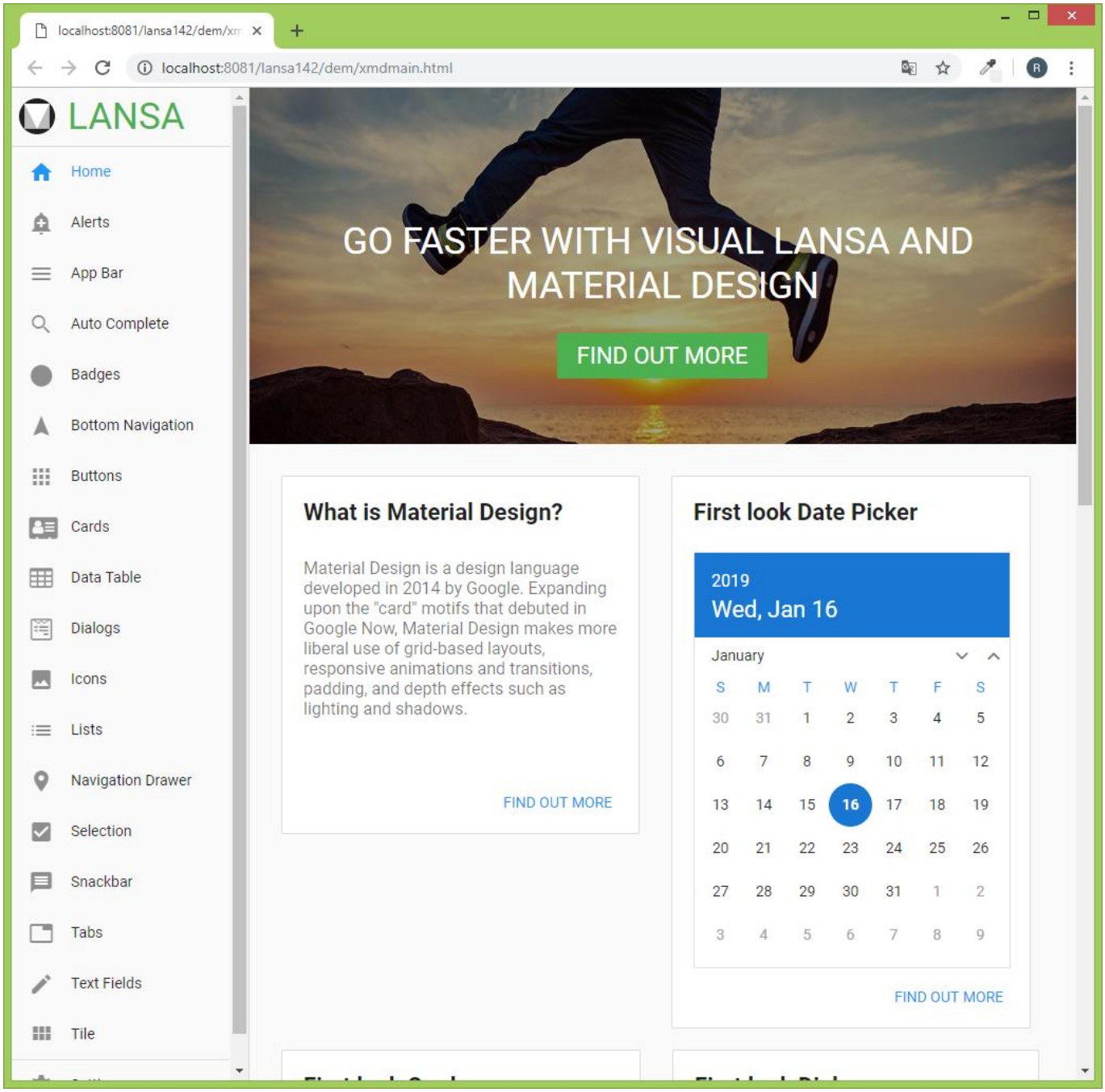
The document in this tip provides simple setup instructions for a dedicated web server on Windows, in a mixed multi-tier environment.

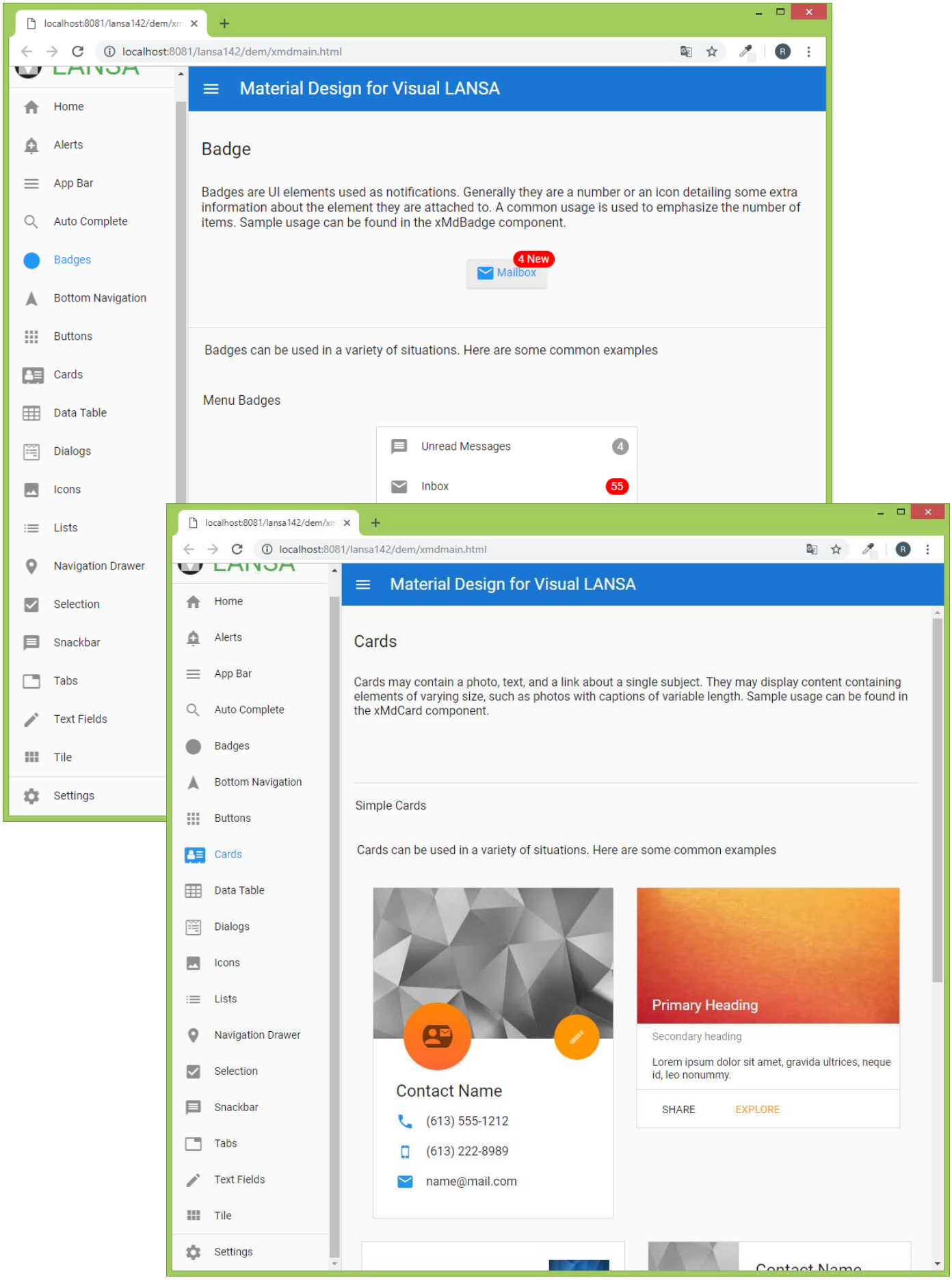
Installing a dedicated Windows web server for Mixed Multi-tier setup

https://www.lansa.com/support/tips/t0643.htm

New VL Web features in EPC142030

Material Design Controls have been added to Visual LANSA in this EPC. On the LANSA Editor Home page, take the option to Explore the Material Design Controls. This launches a web page explaining the Material Design (MD) implementation, the MD controls available and examples of how each control works.




localhost:8081/lansa142/dem/xmdmain.html
Material Design for Visual LANSA
Home
Alerts
App Bar
Auto Complete
Badges
Bottom Navigation
Buttons
Cards
Data Table
Dialogs
Icons
Lists
Navigation Drawer
Selection
Snackbar
Tabs
Text Fields
Tile
Settings
Badge
Badges are UI elements used as notifications. Generally they are a number or an icon detailing some extra information about the element they are attached to. A common usage is used to emphasize the number of items. Sample usage can be found in the xMdBadge component.
4 New
Mailbox
Badges can be used in a variety of situations. Here are some common examples
Menu Badges
Unread Messages
4
Inbox
55
Cards
Cards may contain a photo, text, and a link about a single subject. They may display content containing elements of varying size, such as photos with captions of variable length. Sample usage can be found in the xMdCard component.
Simple Cards
Cards can be used in a variety of situations. Here are some common examples
Contact Name
(613) 555-1212
(613) 222-8989
name@mail.com
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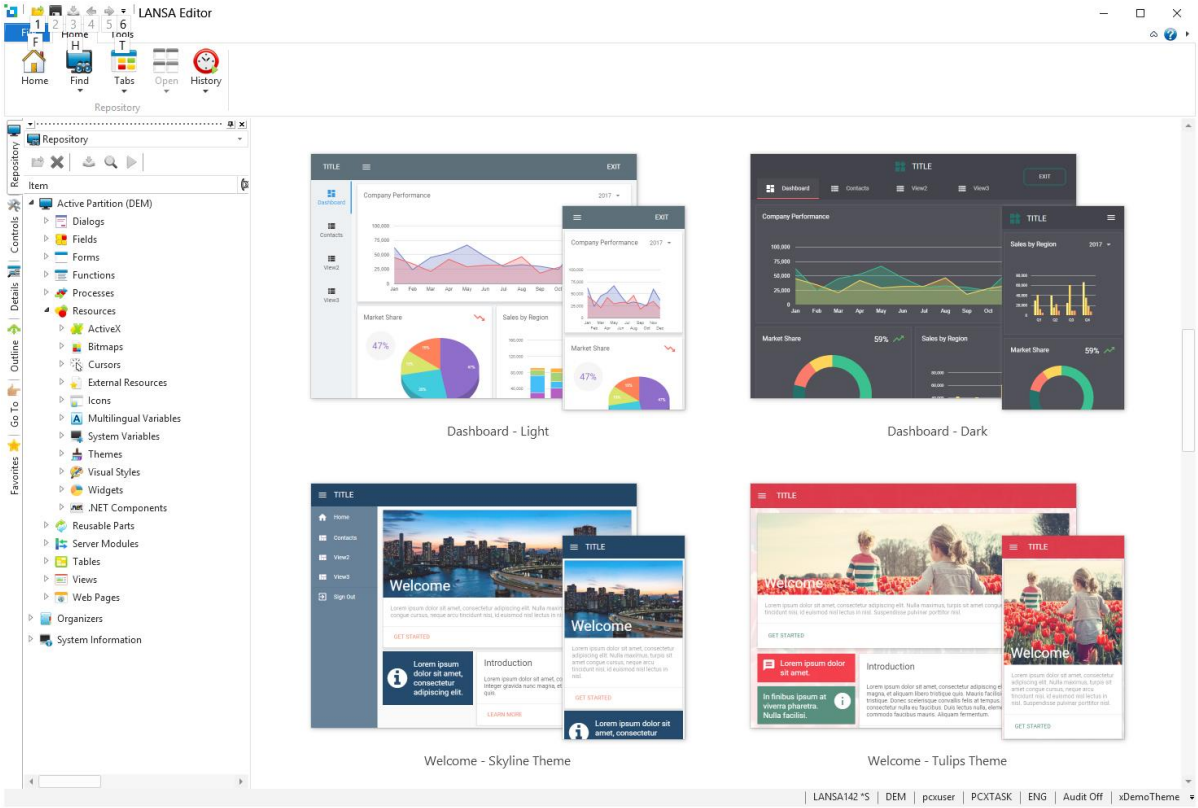

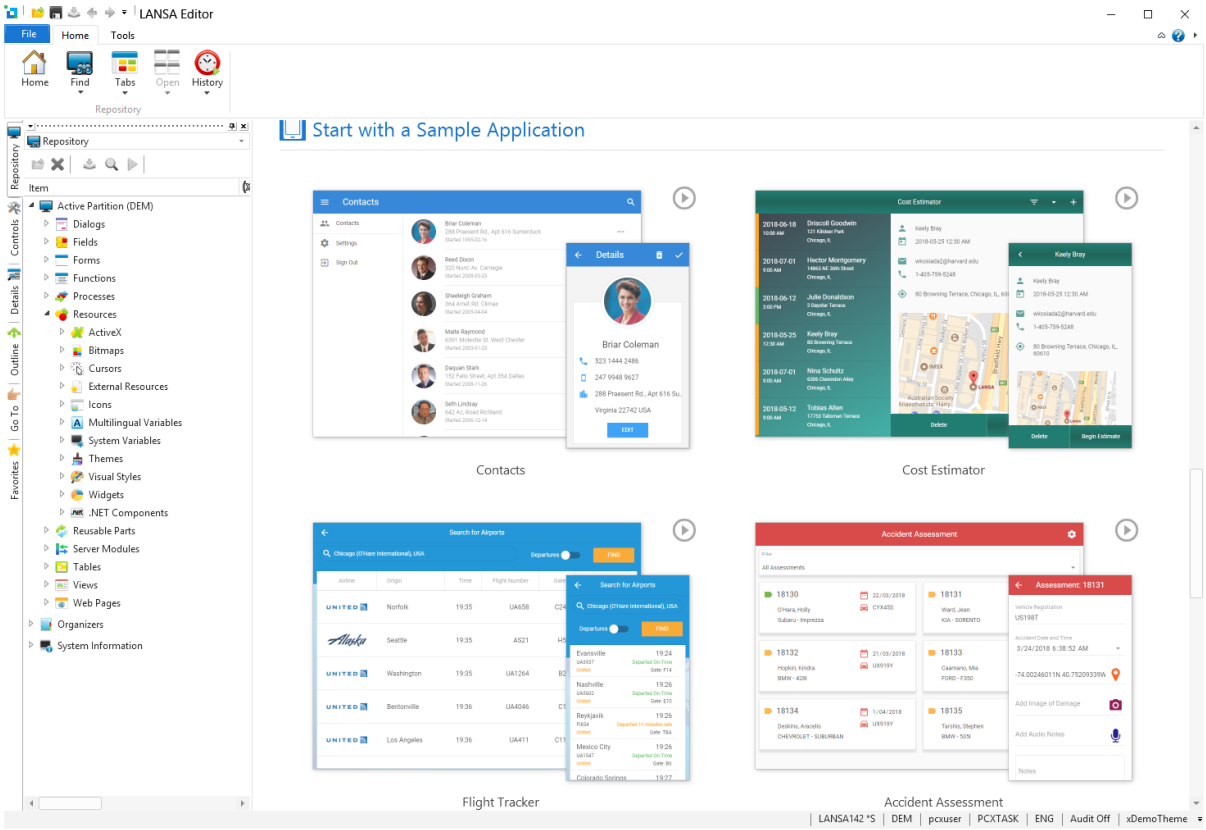

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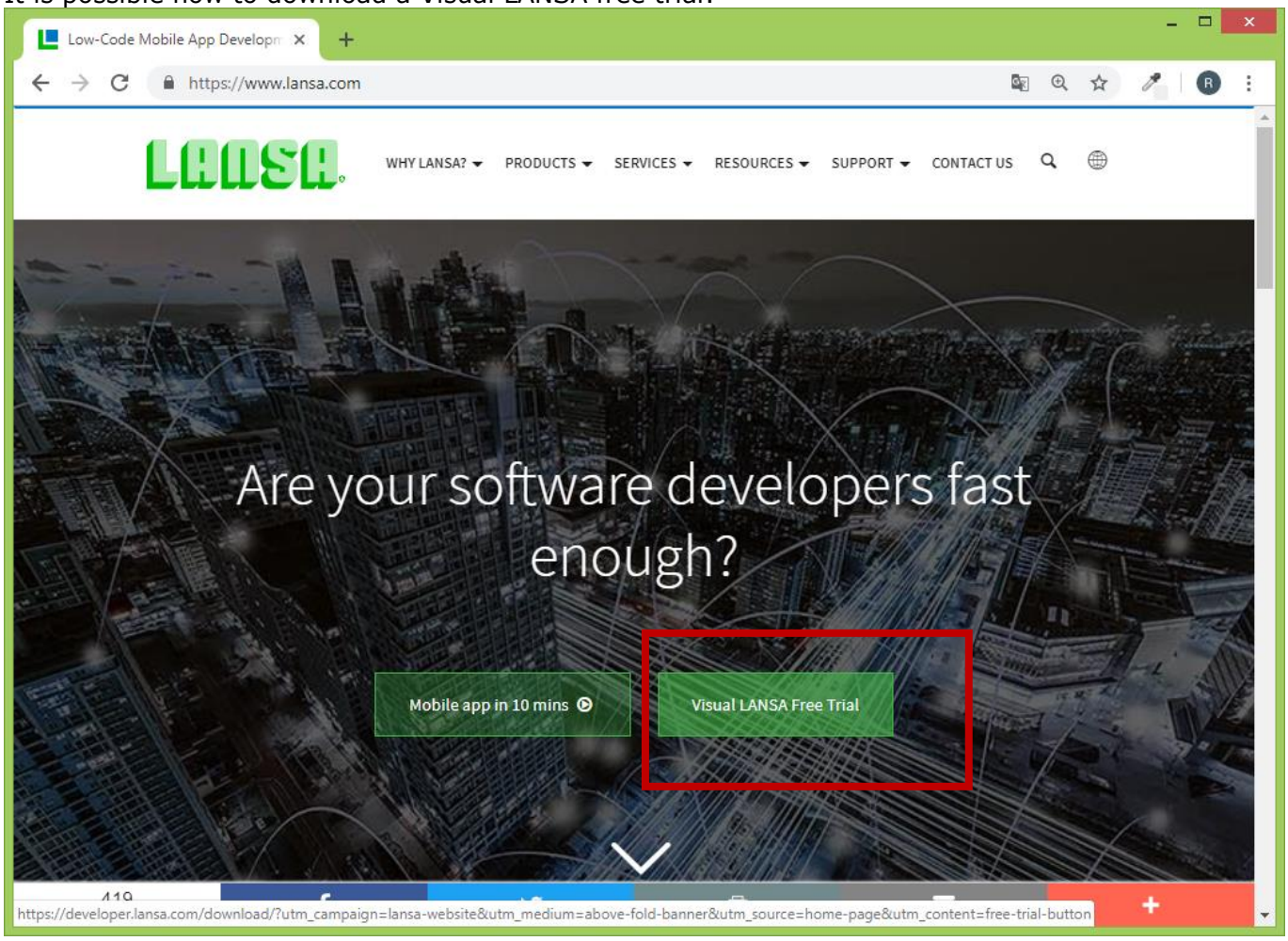

Why could this free download be useful for you?

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