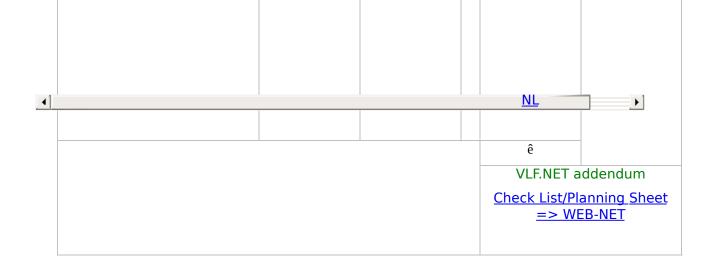
## **VLF Deployment Check Lists**

#### What type of Visual LANSA Framework Application have you created?

Windows Rich Client		Web Browser			
ê		ê			
Stand Alone	Clie	nt/Server			
Check List/Planning Sheet => WIN1	ê			ê	ê
	Deploying the Client Part	Deploying th	e Server Part	IBM i server <u>Check</u>	Windo web ser
	Check List/Planning Sheet => WIN2	ê  IBM i server  Check List/Planning Sheet => WIN3	ê Windows server Check List/Planning Sheet => WIN4	List/Planning Sheet => WEB1	Chec List/Plan Sheet: WEB2  or Chec List/Plan Sheet: WEB2
	ê	ê		ê	
	RAMP-NL addendum <u>Check</u> <u>List/Planning</u> <u>Sheet =&gt;</u> <u>WIN-RAMP-</u> <u>NL</u>	RAMP-TS addendum  Check List/Planning Sheet => WIN-RAMP- TS		RAMP addendum  Check List/Planning Sheet => WIN-RAMP- TS or Check List/Planning Sheet => WIN-RAMP-	ê



The information in this guide is intended as a foundation on which users can build their site-specific deployment procedures.

Disclaimer: While every effort has been made to ensure that the information in this material is accurate, in no event shall LANSA be liable for any damages arising from its use. LANSA MAKES NO WARRANTIES, EXPRESSED OR IMPLIED.

Edition Number EPC132100
Edition Date November 16, 2014
© 2014 LANSA

Check List/Planning Sheet => WEB1
 Check List/Planning Sheet => WEB2A
 Check List/Planning Sheet => WEB2B
 Check List/Planning Sheet => WEB-RAMP-TS
 Check List/Planning Sheet => WEB-RAMP-NL
 Check List/Planning Sheet => WEB-NET
 Check List/Planning Sheet => WIN1
 Check List/Planning Sheet => WIN2
 Check List/Planning Sheet => WIN3
 Check List/Planning Sheet => WIN-RAMP-TS
 Check List/Planning Sheet => WIN-RAMP-TS
 Check List/Planning Sheet => WIN-RAMP-NL

### Check List/Planning Sheet => WEB1

- Overview
- WEB1, Step 1. Pre-Requisite Actions and Other Considerations
- WEB1, Step 2. Package the Deployment Material on the Source System
- WEB1, Step 3. Move the Deployment Material to the Target System
- WEB1, Step 4. Install the Deployment Material on the Target System

•

WEB1, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

This check list shows the steps required to deploy a Framework web application on a Series i server.

#### WEB1, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	Ho	ow to Do It ü
Licensing requirements for the target system			d more information, see w.lansa.com/support/licensing/index.
A Framework application ready for deployment	You need to have an exversion of your Framew application ready for deployment		For more information see: Deployin a Framework Version in the Framework Guide.
Establish the minimum supported configuration (MSC)	You need to formally deminimum configuration solution will viably supplincluding:  • Minimum hardware requirements • Minimum software requirements • Supported screen resolutions • Minimum networki capabilities • Maximum data vol	n your port, e	<ul> <li>A formal MSC will:</li> <li>Inform decisions about the overall solution cost</li> <li>Establish the environment required to test the deployment the solution or any patch/hotfix made to it.</li> <li>Raise management's awarenes of the risk in implementing a "su MSC" solution.</li> <li>For more information refer to Application Performance in the Framework Guide.</li> </ul>

## WEB1, Step 2. Package the Deployment Material on the Source System

When you have completed these steps, you will have a single composite save file named Bnn\_ALL that contains everything from your IBM i that is to be deployed.

Step	Activity	How to Do It
Assign a build number	Assign a build number nn to the version of your product being released. This number will be used in the following steps for a file naming convention.	
Optionally include VLF.NET objects	If you want to compile the Framework as a .NET executable, you need to save it with the VLF.NET feature selected.	See Create VLF.NET Objects t Included in the Deployment F
Include LANSA server objects (typically on the IFS)	Create a save file for holding server objects. Include the following standard LANSA Server objects:  Images Javascripts HTML files XML Files CSS Files	Create an IBM i save file called example, Bnn_IFS (where nn is version number) using the CR command.  Save from the IBM i IFS all objected types into this save using the SAV command. This include LANSA and non-LANSA objects. In a typical installation would include all the files in the content of the same and folder.
		images folder.  See Notes on the SAV and RST commands.
		Make sure these files are inclu
		VF_*.*
		FP_*.*
		UF*.*
		^ la - !: l d

Include your own non- LANSA objects	If your application contains non- LANSA objects, create save files containing them. Non-LANSA objects are:	Create as many IBM i save files named Bnn_OM1, Bnn_OM2, etc as required to contain other non-LANSA IBM i objects.
	<ul> <li>RPG Programs</li> <li>DDS Files</li> <li>Cobol Programs</li> <li>DB2 files</li> <li>Data Areas</li> <li>Data Queues</li> </ul>	Save all non-LANSA objects into the Bnn_OM1, 2, 3 n save files files using the SAVOBJ command.

Create an IBM i Export List	Create a LANSA export list named Bnn_ALL.	Use the option Work with lists of objects to be exported of the LANSA Housekeeping menu to create the export list.
Include your own LANSA objects in the export list	Include your own LANSA objects such as filters, command handlers etc.	Use the options in the Work with Export List menu to make sure all the objects used in your application are included in the export list.
Include save files in the export list	Include the save files you have created in the export list	Use option Add other/non-LANSA objects to the list. Use F20 to find the files.

Include all the standard Framework objects in the export list	Use F8 to make generic selections when adding objects to the export list.	
	Fields:	FP_E*

#### Notes on the SAV and RST commands

You will need to use the SAV and RST commands to save and restore all your objects to and from the save file (the SAVOBJ and RSTOBJ commands cannot be used for IFS objects because these commands are used to save IBM i objects that reside in libraries.)

In the following example:

- SAV will save a large number of the required files from the images folder and a private folder called VLF Private Development.
- The save also includes all the RAMP-NL deployment cab files contained in a directory called RAMP\_NewLook.
- The target save file is called IFSSave.

You can use this example as a starting point for building your own SAV commands, but you need to ensure that the command contains the path and name of the save file you have created, all the files required for your site, and that the path names are correct.

If you wish to enter this command freehand from the command line, use CALL QCMD. Pressing F11 from within QCMD will provide you with space to enter the SAV command with many objects.

```
SAV DEV('/QSYS.lib/QGPL.lib/B01_IFS.file')
OBJ(('/LANSA_vlfpgmlib/webserver/images/ VF_*.*')

('/LANSA_vlfpgmlib/webserver/images/VLF_Private_Development/VF_*.*

('/LANSA_vlfpgmlib/webserver/images/VLF_Private_Development/FP_*.*
```

('/LANSA\_vlfpgmlib/webserver/images/VLF\_Private\_Development/RAMP\_NewLook/\*')

If there is not enough space to specify all the objects you require, you can create more than one save file. For example you could create one save file for objects in the Images folder and another one for objects in the private working folder.

Check the save file using the DSPSAVF command (press Enter to display the objects in the subsequent directories until you've reached the end of the file).

To restore the saved objects to another IFS directory from the save file (IFSSave), you need to issue three RST commands - one for each save directory. Please note that the target directories must already exist on the IFS when running the RST.

The following RST will restore the objects in the saved images directory to a directory of the same name on the target system.

RST DEV('/qsys.lib/vlfpgmlib.lib/B01\_IFS.file') OBJ(('/LANSA\_vlfpgmlib/webserver/images'))

The following RST will restore the objects in the saved private folder (VLF\_Private\_Development) to a new private folder on the target system called VLF\_Private\_Production.

RST DEV('/qsys.lib/vlfpgmlib.lib/B01\_IFS.file')
OBJ(('/LANSA\_vlfpgmlib/webserver/images/VLF\_Private\_Development'
\*INCLUDE
'/LANSA\_vlfpgmlib/webserver/images/VLF\_Private\_Production'))

The following RST will restore the objects in the saved RAMP Newlook folder to a new folder on the target system.

RST DEV('/qsys.lib/vlfpgmlib.lib/B01\_IFS.file')
OBJ(('/LANSA\_vlfpgmlib/webserver/images/VLF\_Private\_Development/RAMP\_NewLoc

#### WEB1, Step 3. Move the Deployment Material to the Target System

There are many ways to physically deploy the Bnn\_ALL save file:

- Tape for IBM i
- CD for an IBM i
- CD for a PC
- E-mail
- Web site download
- Moving an IBM i file to a PC or from a PC

#### Moving an IBM i file to a PC or from a PC

The commands XFLRTOSAVF and XSAVFTOFLR are useful when you want to move an IBM i save file to a PC (or vice versa). For example, the deploy cycle might be:

Step	Activity	How to Do It
Transform the deployment save file to a PC file on the IFS	Use XSAVFTOFLR command to create Bnn_ALL.SAV in any directory on the IFS (e.g. /temp) from the Bnn_ALL save file.	XSAVFTOFLR PATH('/temp/Bnn_ALL.SAV FILE(MYLIB/Bnn_ALL)
Copy the file to a PC folder and zip it	Copy Bnn_ALL.SAV to a PC folder and then zip up to produce Bnn_ALL.ZIP.	
Move to target system	Move Bnn_ALL.ZIP like any file - copy, e-mail, web site download, CD, etc.	
Unzip	At the target unzip Bnn_ALL.ZIP to produce Bnn_ALL.SAV	
Copy to IFS	Copy Bnn_ALL.SAV to any directory on the IFS (e.g. /temp).	
Transform to save file	Use XFLRTOSAVF to transfer Bnn_ALL.SAV into IBM i save file named Bnn_ALL	XFLRTOSAVF PATH('/temp/Bnn_ALL.SAV') FILE(MYLIB/Bnn_ALL)
	The file is now ready to be imported.	

**→** 

### WEB1, Step 4. Install the Deployment Material on the Target System

Step	Activity	How to Do It
Install LANSA for the iSeries on the target IBM i server	From the LANSA CD install LANSA for the iSeries.  Note that the LANSA system has to be on the same version and EPC level as the system on which the deployment material was created.  Also install LANSA for the Web	
If deploying a VLF.NET Application, install Microsoft's .NET Framework on end-user PCs	See Install Microsoft's .NET Framework on end-user PCs.	
-		
Verify that L4Web is installed and operational on the target system	Make sure the partition is web enabled. Execute a LANSA for the Web process or function.	
	!	
Make sure that your HTTP server is configured to support server side includes	For example, if your HTTP Ser configuration is called DEVINS you can execute this comman in an IBM i command line:  WRKHTTPCFG DEVINST  Browse through the configura details and make sure that it	tion
	includes an entry like this one Imbeds On html	
		<b>)</b>

If it doesn't and you are not confident of adding it yourself, contact your IBM i administrator to add such an entry. When your HTTP server configuration has been changed, you generally need to stop and restart it before the changes take effect.

Ensure that
Extended option needs to be selected.
Exchange is enabled

The Enable Extended Exchange option needs to be selected.

Exchange is enabled

From the Tools menu, choose Configure System. Select Miscellaneous tab and verify that Enable Extended Exchange is enabled (that is, the checkbox is checked).

If using VLF.NET, ensure IBM i Apache server configuration is correct Some minor configuration changes may need to be made to the MIME types control table on IBM i Apache servers so that the files are served correctly.

Use the Apache administration browser interface (\*ADMIN instance in port 2001) and click on Content Settings link.

In the MIME tab, click on the ADD button to add the following Content-type entries:

File Extension - Value

application - application/x-ms-application

manifest - application/x-ms-manifest deploy - application/octet-stream

Or if editing the configuration file with a text editor, in the relevant section add these lines:

AddType application/x-ms-application application AddType application/x-ms-manifest manifest AddType application/octet-stream deploy

Create a private working folder for the Framework

You need to create a Private Working Folder to upload the files required to run the Visual LANSA Framework in the browser.

Create this directory as a subdirectory of the LANSA for the

#### WEB1, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Security considerations	Consider making some in files read-only for web broaccess.	•
	Typically this is done by t site administrator at the level.	
	For example, and as a mi XML system definition file Javascript files should alw set up individually or on a basis as read-only to prevunauthorized modification their content.	es and yays be a folder yent
Backup and Recovery strategy	You should have a regular backup and recovery stra- place for your target syste	tegy in
Maintenance strategy	You should devise a strate deploying modifications y make to your VLF applica	ou

**→** 

### Check List/Planning Sheet => WEB2A

- Overview
- WEB2A, Step 1. Pre-Requisite Actions and Other Considerations
- WEB2A, Step 2. Package the Deployment Material on the Source System
- WEB2A, Step 3. Move the Deployment Material to the Target System
- WEB2A, Step 4. Install the Deployment Material on the Target System

\_\_1

■ WEB2A, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

This check list shows the steps required to deploy a Framework web application to a Windows web server with the target LANSA system on a Windows machine.

#### WEB2A, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do It	ü
Licensing requirements for the target system	LANSA for the Web license.  The license needs to be on the Windows application server.  No licences are required on the Windows web server machine.	http://ww	ed more information, see w.lansa.com/support/licensing/ind
WAM support	If you intend to use need Internet Explor higher) and the MSX parser installed.	er V6.0 (or	
A Framework application ready for deployment	You need to have ar version of your Fran application ready fo deployment	nework	For more information see: Deploy a Framework Version in the Framework Guide.
Establish the minimum supported configuration (MSC)	You need to formally minimum configurate solution will viably sincluding:  Minimum hardwarequirements  Minimum softwarequirements  Supported screen resolutions  Minimum netwood capabilities  Maximum data	tion your support, vare are en orking	<ul> <li>A formal MSC will:         <ul> <li>Inform decisions about the overall solution cost</li> <li>Establish the environment required to test the deployme the solution or any patch/hotf made to it.</li> <li>Raise management's awarer of the risk in implementing a MSC" solution.</li> </ul> </li> <li>For more information refer to Application Performance in the Framework Guide.</li> </ul>

# WEB2A, Step 2. Package the Deployment Material on the Source System

Step	Activity How t	to Do It
Assign a build number	Assign a build number nn to the version of your product being released. This number will be used in the following steps for a file naming convention.	
Optionally include VLF.NET objects	If you want to compile the Framework as a .NET executable, you need to save it with the VLF.NET feature selected.	See Create VLF.NET Objects to b Included in the Deployment Pacl
7:		
Zip up server objects	Create a zip file and include all standard server objects and your own server objects:  Images Javascripts HTML files XML Files CSS Files Dills	Create a .zip file called, for example Bnn_Webserver.zip (where nn is yversion number), and include files from the LANSA for the L4web Im Folder and your Private Working Folder (which normally resides un your images folder).  Make sure these files are included VF_*.*  FP_*.*  UF*.*  Also include your own server obje If you are deploying VLF.NET applications, see Add VLF.NET Obj to the Deployment Package.
		In a typical installation you would include all the files under the ima folder (including the private work folder), so you may simply decide zip up the entire contents of the images folder.

		However, it is important that the objects end up in the right directories on the target machine, so if you are not using the same directory names, you may want to create two zip files one containing the objects in the images folder (excluding the private working folder images) and another zip file containing the files in your private working folder.
Start the Deployment Tool	Logon to Visual LANSA and start the Deployment Tool.	Start Visual LANSA and logon to the partition containing the application to be deployed.  Ensure that you use a user profile which is authorized to the objects
		that are being deployed.
		From the Tools ribbon, select the Deploy button. The Visual LANSA Deployment Tool's main window will open.
Create a Deployment Tool application	Create an application and a package using the Deployment Tool.	Click on the New Application button on the tool bar or select the New command from the Application menu.
and package	Do not use any template.	Fill in the application details.
		Click OK. You are prompted to create a Package. Fill in the package details and click OK.
		The Package Control Panel is displayed
Set the Deployment option	Set the deployment option of the package to Self-Extracting Zip.	Display the Deployment Option window by clicking on the Deployment button.
	If you select another deployment option, this check list may not work.	
Specify package settings	Because the package will be deployed to a system which already has Visual LANSA installed on it, you may choose	Click on the Package Settings button on the toolbar to display the Package Settings window.

Specify package settings	Because the package will be deployed to a system which already has Visual LANSA installed on it, you may choose the option to move the LANSA code over as well as the runtime	Click on the Package Settings button on the toolbar to display the Package Settings window.
--------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

#### WEB2A, Step 3. Move the Deployment Material to the Target System

Move the deployment material to the target system	Copy the msi file (packagename_v1.0.0_en-us.msi) in the package folder (\X_WIN95\X_LANSA\x_apps\packagename\) to the required destination media such as CD, network server etc.	
	(Note: Do not copy the entire package directory.)	

■ Moving an IBM i file to a PC or from a PC

**→** 

#### Moving an IBM i file to a PC or from a PC

The commands XFLRTOSAVF and XSAVFTOFLR are useful when you want to move an IBM i save file to a PC (or vice versa). For example, the deploy cycle might be:

Step	Activity	How to Do It
Transform the deployment save file to a PC file on the IFS	Use XSAVFTOFLR command to create Bnn_ALL.SAV in any directory on the IFS (e.g. /temp) from the Bnn_ALL save file.	XSAVFTOFLR PATH('/temp/Bnn_ALL.SAV' FILE(MYLIB/Bnn_ALL)
Copy the file to a PC folder and zip it	Copy Bnn_ALL.SAV to a PC folder and then zip up to produce Bnn_ALL.ZIP.	
Move to target system	Move Bnn_ALL.ZIP like any file - copy, e-mail, web site download, CD, etc.	
Unzip	At the target unzip Bnn_ALL.ZIP to produce Bnn_ALL.SAV	
Copy to IFS	Copy Bnn_ALL.SAV to any directory on the IFS (e.g. /temp).	
Transform to save file	Use XFLRTOSAVF to transfer Bnn_ALL.SAV into IBM i save file named Bnn_ALL	XFLRTOSAVF PATH('/temp/Bnn_ALL.SAV') FILE(MYLIB/Bnn_ALL)
	The file is now ready to be imported.	

**→** 

## WEB2A, Step 4. Install the Deployment Material on the Target System

Note that in most production configurations the Windows web server and the Windows application server are two separate machines.

Step	Activity	How to Do It
Install Visual LANSA from CD	On the target application sinstall Visual LANSA either Independent Workstation of Independent Server.  During the installation, in the Partition Initialization dialocselect:  Visual LANSA Framework  Enable for the Web  You might want to also select the demonstration system in order to test LANSA installation.  NOTE: if your application to WAMs, you must first instate Visual LANSA, configure the partition to be RDMLX enally and only then import Visual LANSA Framework using the Partition Initialize option from Development Environment screen.	If you need more information, second lines and visual LANSA framework God and visual LANSA Framework - simply import the Framework objects interest your visual LANSA system.  If you need more information, second lines and visual LANSA on Windows Gui and visual LANSA Framework - simply import the Framework objects into your visual LANSA system.
If deploying a VLF.NET Application, install Microsoft's .NET Framework on end-user PCs	See Install Microsoft's .NE Framework on end-user Po	

4			
for the	all LANSA the Web on Windows ver from CD	On the target Windows server install:  LANSA for the Web Server  LANSA for the Web Administrator	Install it to the same directory as Visual LANSA. If you have multiple LANSA systems, use the same LANSA configuration as for the LANSA for the Web system.  Accept default installation settings.  If you need more information, see Installing LANSA on Windows Guide

Ensure you have a web	application server has a	If you need more information, see http://www.lansa.com/support/licensing/index.htm
license	Web license.	

Configure LANSA for the Web	Ensure IIS is running by entering this URL into the browser running on the Web Server:  http://localhost	If you need more information, see Microsoft IIS and the IIS Plug-in.  Use the iisreset command from a command window if you have problems.
	2. Make sure Microsoft Windows Script Host (WSH) is installed by locating the file wscript.exe.	
	3. Configure LANSA Listener on Windows Data/Application Server	Follow the steps in Configure LANSA Listener on Windows Data/Application Server.
	4. Create User on Windows Data/Application Server	Follow the steps in Create User on Windows Data/Application Server.
	5. Configure Data/Application Server	Follow steps 1 and 2 in Configure Data/Application Server.
	6. Verify IIS Plug-in Communications with Data/Application Server	Follow the steps in Configure IIS Plugin Communications with Data/Application Server.
	7. Verify that the Web Server is ready to use.	

#### WEB2A, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Security considerations	Consider making some im files read-only for web broaccess.	•
	Typically this is done by the site administrator at the flevel.	
	For example, and as a min XML system definition file Javascript files should alw set up individually or on a basis as read-only to prevunauthorized modification their content.	s and ays be folder ent
Backup and Recovery strategy	You should have a regular backup and recovery strat place for your target syste	
Maintenance strategy	You should devise a strate deploying modifications y make to your VLF applicat	ou

## Check List/Planning Sheet => WEB2B

- Overview
- WEB2B, Step 1. Pre-Requisite Actions and Other Considerations
- WEB2B, Step 2. Package the Deployment Material on the Source System
- WEB2B, Step 3. Move the Deployment Material to the Target System
- WEB2B, Step 4. Install the Deployment Material on the Target System

\_\_1

■ WEB2B, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

This check list shows the steps required to deploy a Framework web application to a Windows web server with the target LANSA system on an IBM i machine.

### WEB2B, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do	t	ü
Licensing requirements for the target system	LANSA for the Web license.  The license needs to be on the IBM i application server.		ed more information, see w.lansa.com/support/licens	sing/index
	No licences are required on the Windows web server machine.			
A Framework application ready for deployment	You need to have an oversion of your Frame application ready for deployment		For more information see a Framework Version in the Framework Guide.	
Establish the minimum supported configuration (MSC)	You need to formally minimum configuration solution will viably surincluding:  Minimum hardwarequirements Minimum softwarequirements Supported screen resolutions Minimum networe capabilities Maximum data v	on your pport, are re n king	<ul> <li>A formal MSC will:</li> <li>Inform decisions abooverall solution cost</li> <li>Establish the environ required to test the dethe solution or any paramade to it.</li> <li>Raise management's of the risk in impleme MSC" solution.</li> <li>For more information refeapplication Performance Framework Guide.</li> </ul>	ment eployment tch/hotfix awarenes nting a "si

# WEB2B, Step 2. Package the Deployment Material on the Source System

## Perform these steps on the development IBM i application server:

Step	Activity	How to Do It
Assign a build number	Assign a build number nn to version of your product be released. This number will used in the following steps file naming convention.	ng be
Optionally include VLF.NET objects	If you want to compile the Framework as a .NET executable, you need to sa with the VLF.NET feature selected.	See Create VLF.NET Objects to b Included in the Deployment Pacl ive it
Include your own non- LANSA objects	If your application contains LANSA objects, create save containing them. Non-LANS objects are:	e files   named Bnn_OM1, Bnn_OM2, etc
	<ul> <li>RPG Programs</li> <li>DDS Files</li> <li>Cobol Programs</li> <li>DB2 files</li> <li>Data Areas</li> <li>Data Queues</li> </ul>	Save all non-LANSA objects into Bnn_OM1, 2, 3 n save files file using the SAVOBJ command.
Create an IBM i Export List	Create a LANSA export list named Bnn_ALL.	Use the option Work with lists of objects to be exported of the LAI Housekeeping menu to create th export list.

4	Include your	Include your own LANSA objects	Use the options in the Work with
	own LANSA objects in the export list	such as filters, command handlers etc.	Export List menu to make sure all the objects used in your application are included in the export list.
	Include save files in the export list	Include the save files you have created in the export list	Use option Add other/non-LANSA objects to the list. Use F20 to find the files.

Use F8 to make generic selections when adding objects to the export list.	
Fields:	FP_E*
	FP_R*
	UB*
	UF_*
	VF_*
Files (Include data in the files)	FPTAB
	FPTABU
	VFPPF06
	VFPPF07
Processes/functions:	UF_*
	VF*
OH- / ANGA /T	LL DIFOOF
*SRVPGM)	U_BIF985
Web HTML components:	FP_R*
	UB_*
	VF_*
Weblets:	FP*
	UB*
	VLF_LAYOUT
Visual LANSA components:	FP_*
	VF_AW*
	VF_LW*
	VF_SW*
	to the export list.  Fields:  Files (Include data in the files)  Processes/functions:  Other/non-LANSA: (Type *SRVPGM)  Web HTML components:  Weblets:

### WEB2B, Step 3. Move the Deployment Material to the Target System

There are many ways to physically deploy the Bnn\_ALL save file:

- Tape for IBM i
- CD for an IBM i
- CD for a PC
- E-mail
- Web site download
- Moving an IBM i file to a PC or from a PC

### Moving an IBM i file to a PC or from a PC

The commands XFLRTOSAVF and XSAVFTOFLR are useful when you want to move an IBM i save file to a PC (or vice versa). For example, the deploy cycle might be:

Step	Activity	How to Do It
Transform the deployment save file to a PC file on the IFS	Use XSAVFTOFLR command to create Bnn_ALL.SAV in any directory on the IFS (e.g. /temp) from the Bnn_ALL save file.	XSAVFTOFLR PATH('/temp/Bnn_ALL.SAV FILE(MYLIB/Bnn_ALL)
Copy the file to a PC folder and zip it	Copy Bnn_ALL.SAV to a PC folder and then zip up to produce Bnn_ALL.ZIP.	
Move to target system	Move Bnn_ALL.ZIP like any file - copy, e-mail, web site download, CD, etc.	
Unzip	At the target unzip Bnn_ALL.ZIP to produce Bnn_ALL.SAV	
Copy to IFS	Copy Bnn_ALL.SAV to any directory on the IFS (e.g. /temp).	
Transform to save file	Use XFLRTOSAVF to transfer Bnn_ALL.SAV into IBM i save file named Bnn_ALL	XFLRTOSAVF PATH('/temp/Bnn_ALL.SAV') FILE(MYLIB/Bnn_ALL)
	The file is now ready to be imported.	

**→** 

# WEB2B, Step 4. Install the Deployment Material on the Target System

for the iSeries on the target IBM i server  LANSA for the iSeries.  Note that the LANSA system has to be on the same version and EPC level as the system on which the deployment material was created.  Also install LANSA for the Web.  See Install Microsoft's .NET Framework on end-user PCs.  Possible is a complete in the web server on the level of the web install.  Ensure you have a web license  Ensure you have a web license  Install LANSA for the target windows server install:  Install LANSA for the iSeries.  Note that because the web server be on Windows there is no need to configure the web server on the level on which windows there is no need to configure the web server on the level on which windows the web server and end web server on the level on the windows the web server and the web server on the level on the web server and the web server on the level on the web server on the level on the web on the web server and the web server on the level on the web on the web on the web in the web server and the web server on the level on the web on the web on the web in the web server on the level on the level on the web server on the level on the web server on the level on the level on the web server on the level on th	Step	Activity	How to	Do It
IBM i server  Note that the LANSA system has to be on the same version and EPC level as the system on which the deployment material was created.  Also install LANSA for the Web.  See Install Microsoft's .NET Framework on end-user PCs.  Pramework on end-user PCs  Ensure you have a web license  Ensure the target application server has a Web license.  If you need more information, see http://www.lansa.com/support/licensing/indexionserver install:  Install LANSA for the Web Server  LANSA for the Web Server  LANSA for the Web Server  LANSA for the Web	for the iSeries		tall	Follow the instructions in <u>Installin</u> LANSA on IBM i Guide.
If deploying a VLF.NET Application, install Microsoft's .NET Framework on end-user PCs.  Ensure you have a web license Web license.  Install LANSA for the Web on the Windows server from CD  See Install Microsoft's .NET Framework on end-user PCs.  If you need more information, see http://www.lansa.com/support/licensing/indexing for the Web on the Windows server from CD  Accept default installation setting fixed for the Web Server install:  Accept default installation setting fixed fixed for the Web Server installing LANSA on Windows Gu		to be on the same vers EPC level as the systen which the deployment	ion and n on	Note that because the web serve be on Windows there is no need t configure the web server on the I
VLF.NET Application, install Microsoft's .NET Framework on end-user PCs.  Ensure you have a web license  Install LANSA for the Web on the Windows server from CD  Framework on end-user PCs.  If you need more information, see http://www.lansa.com/support/licensing/index  Accept default installation setting install:  If you need more information, see http://www.lansa.com/support/licensing/index  If you need more information, set install:  If you need more information, set install:  If you need more information, set installing LANSA on Windows Gu		Also install LANSA for t	he Web.	
VLF.NET Application, install Microsoft's .NET Framework on end-user PCs.  Ensure you have a web license  Install LANSA for the Web on the Windows server from CD  Framework on end-user PCs.  If you need more information, see http://www.lansa.com/support/licensing/index  Accept default installation setting install:  If you need more information, see http://www.lansa.com/support/licensing/index  If you need more information, set install:  If you need more information, set install:  If you need more information, set installing LANSA on Windows Gu	If deploying a	See Install Microsoft's	NFT	
have a web license application server has a Web license. http://www.lansa.com/support/licensing/index lines. http://www.lansa.com/support/licensing/index lines. http://www.lansa.com/support/licensing/index lines. http://www.lansa.com/support/licensing/index lines. http://www.lansa.com/support/licensing/index lines. lines. lines	VLF.NET Application, install Microsoft's .NE Framework on	Framework on end-use		
have a web license application server has a Web license. http://www.lansa.com/support/licensing/index lines. http://www.la				
for the Web on the Windows server from CD  install:  LANSA for the Web Server  LANSA for the Web  If you need more information, se Installing LANSA on Windows Gu	have a web	application server has a	_	
for the Web on the Windows server from CD  install:  LANSA for the Web Server  LANSA for the Web  If you need more information, se Installing LANSA on Windows Gu				
<ul> <li>LANSA for the Web Server</li> <li>LANSA for the Web</li> </ul>	for the Web on		server	Accept default installation setting  If you need more information, see
		LANSA for the Web		Installing LANSA on Windows Gui
	LANSA for the	Administrator configure	e your	If you need more information, second line installing LANSA on Windows Gui

4	i as the	LANSA system on your IBM i.	<b>)</b>
	application server.		
	Verify that L4Web is installed and operational on the target system	Make sure the partition is web enabled. Execute a LANSA for the Web process or function.	
	Make sure LANSA for the WEB is configured to	Use the LANSA for the Web Administrator to indicate that your system will use SSI.	Start the LANSA for the Web Administrator and open your local configuration. Choose the Maintain Systems option from the Tools menu.
	support Server Side Include		Select the appropriate LANSA system and click on the Change button. Make sure the Server Side Include (SSI) support check box is checked.
	Ensure that Extended Exchange is enabled	The Enable Extended Exchange option needs to be selected.	Using the LANSA for the Web Administrator, connect to your server system.
			From the Tools menu, choose

Extended Exchange is enabled	option needs to be selected.	Administrator, connect to your server system.
		From the Tools menu, choose Configure System. Select Miscellaneous tab and verify that Enable Extended Exchange is enabled (that is, the checkbox is checked).

Create a private working folder for the Framework

You need to create a Private Working Folder to upload the files required to run the Visual LANSA Framework in the browser.

Create this directory as a subdirectory of the LANSA for the Web images directory on your Windows web server.

For example, if your LANSA for the Web images directory was named IMAGES, you might create a directory named <C:\Program Files\<LANSA>\Webserver\ IMAGES\VLF\_Private\_Folder.

The private working directory

If you cannot view the contents of this folder you need to enable it for directory browsing within your web server.

For IIS web servers, this may be done by:

- Opening Internet Information Services from Administrative Tools in the Control panel
- Selecting the images directory from the list of web sites
- Displaying the properties of the directory and checking the 'Directory Browsing' box.

### WEB2B, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Security considerations	Consider making some im files read-only for web broaccess.	•
	Typically this is done by the site administrator at the flevel.	
	For example, and as a min XML system definition file Javascript files should alw set up individually or on a basis as read-only to prevunauthorized modification their content.	s and ays be folder ent
Backup and Recovery strategy	You should have a regular backup and recovery strat place for your target syste	
Maintenance strategy	You should devise a strate deploying modifications your VLF applicate	ou

## Check List/Planning Sheet => WEB-RAMP-TS

Use this check list in conjunction with Check List/Planning Sheet => WEB1 when you are deploying a RAMP-TS application to an IBM i server.

- Overview
- WEB-RAMP-TS, Step 1. Pre-Requisite Actions and Other Considerations
- WEB-RAMP-TS, Step 2. Prepare Your RAMP-TS Screen Definitions for Deployment
- WEB-RAMP-TS, Step 3. Install your RAMP-TS Screen Definitions at the Deployment Target
- WEB-RAMP-TS, Step 4. Post-Requisite Actions and Other Considerations

**\_** 



#### **Overview**

This check lists shows you how to include your RAMP-TS objects in a deployment package created as per the instructions in Check List/Planning Sheet => WIN3.

### WEB-RAMP-TS, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do It	ü
Licensing requirements for the target system	Axes-TS needs to be licensed on the target IBM i server.		

Establish the minimum supported configuration (MSC)	You need to formally define the minimum configuration your solution will viably support, including:  Minimum hardware requirements  Minimum software requirements  Supported screen resolutions  Minimum networking capabilities  Maximum data volumes.	<ul> <li>A formal MSC will:</li> <li>Inform decisions about the overall solution cost</li> <li>Establish the environment required to test the deployment the solution or any patch/hotfix made to it.</li> <li>Raise management's awarenes of the risk in implementing a "si MSC" solution.</li> <li>For more information refer to Application Performance in the Framework Guide.</li> </ul>
-----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# WEB-RAMP-TS, Step 2. Prepare Your RAMP-TS Screen Definitions for Deployment

In your development environment your RAMP-TS screen definitions are kept in the Axes Screens folder, typically named \aXes\ts\screens. If you used Private Definition Folder(s) to segment your screen definitions, these will appear as sub-folders of the Axes screens folder.

Step	Activity	How to Do It
Check definition files	Check that any example or testing static or dynamic table definitions have been removed from the respective definition files.  These would typically be unused in the application now and may fail if they are deployed to a production environment.	Open the Tables_Static.txt and Tables_Dynamic.txt files in your private you have one, or the axes\ts\screens fol remove any table definitions that are no required.
Add aXes files to a save file	Copy these files from your development Axes screens folder and/or any associated private definition to a save file:  • application_definition.css (plus application_definition_*.css) • application_definition.js • Extension_*.js • screen_*.js • screen_*.js • screens.jsn • Tables_Static.txt • Tables_Dynamic.txt • Userenv.js • *.xml Note that some of these files may not exist in your system. Also include the uf_sy420_rts.js	First create a save file using the CRTSAV command, and then use the IBM i save command to save the files to the save files for example this command saves the cothe /axes directory to a save file:  SAV DEV('/qsys.lib/savefilelib.lib/RAMPTSF.file' OBJ(('/axes'))  This command saves the contents of /ax /axesdemo directory:  SAV DEV('/qsys.lib/savefilelib.lib/RAMPTSF.file' OBJ(('/axes') ('/axesdemo'))  This command saves the required files ir private folder to a save file:  SAV DEV('/QSYS.lib/QGPL.lib/RAMPTSF.file') OBJ(('/axes/ts/screens/MyFolder/application_defin ('/Axes/ts/screens/MyFolder/application_definition_▼

file if your application uses
shared scripts. This file is
located in the ts/skins folder or
your private definition folder.

If the application is to be displayed in a language other than English, the modified text files, Texts\_Cust\_\*.txt also need to be deployed.

Files named like N.scn represent a single 5250 screen definition. Normally these files are only used while doing RAMP-TS development and do not need to be deployed to execution/run time target systems. You would only include these files in the deployment package if you want to allow people in the target environment to modify screen definitions.

('/Axes/ts/screens/MyFolder/Extension\_\*.js')

('/Axes/ts/screens/MyFolder/screen\_\*.js')

('/Axes/ts/screens/MyFolder/screens.jsn')

('/Axes/ts/screens/MyFolder/Tables\_\*.txt')

('/Axes/ts/screens/MyFolder/Userenv.js')

('/Axes/ts/screens/MyFolder/\*.xml')

('/Axes/ts/skins/uf\_sy420\_rts.js')) TGTRLS(V5R3M0)

If you wish to enter this command freehand from the command line, use CALL QCMD. Pressing F11 from within QCMD will provide you with space to enter the SAV command with many objects.

# WEB-RAMP-TS, Step 3. Install your RAMP-TS Screen Definitions at the Deployment Target

Step	Activity	How to Do It		
Install Axes-TS on the target computer	Axes-TS needs to be installed on the target IBM i server.	See Install and Configure RAMP-TS/aXes- your IBM i Server.		
Create application folder	On the target system, create an application folder as a subfolder of the \axes\ts\screens folder using the ibm i CRTDIR command.	The name of the folder can contain only letters from the English alphabet or numbers, no blanks.  For example to create folder MyApplicat in \axes\ts\screens\ folder:  CRTDIR DIR('axes\ts\screens\myapplication1')		
Set authorities	Use the IBM i WRKLNK command and make sure that folder MyApplication1 has *R rights for user *PUBLIC and no other rights.	Use WRKLNK OBJ('axes\ts\screens\ MyApplication1') then use option 9=Wo with authority to display and alter the authority to folder MyApplication1.		
Load tables	SQL commands may be used to load any static or dynamic tables in your application.	The commands execute under the user profile that the aXes server is executing under.		
	Check that the user the aXes server is executing under has READ authorisation to any required SQL/database tables.	You should authorise that user profile for read access to the SQL tables requir for this purpose. This user does not nee any rights to other data base tables tha may be on the system.		
Deploy the save file containing the aXes definitions to the target system	On the target system, use the IBM i RST command to restore the aXes files into the target system's application folder.	To restore the save file use a command lithis:  RST DEV('/qsys.lib/v11vlflib.lib/ramptsf.file') OBJ(('/Axes/ts/screens/MyFolder' *INCLUDE '/axes/ts/screens/myapplication1'))		
	Warning: The restored screens.jsn file(s) contains all your RAMP-TS screen definitions.	The DEV parameter specifies the name a path of the save file.		

4 The OBJ parameter specifies: If someone on the target system starts Axes as a First the folder from which the files were developer/designer and saved from attempts to identify a \*INCLUDE the objects that match the screen and save the object name pattern definition, they will cause Lastly the folder on the target system to the screens.jsn file to be which the files are to be (re)published. This will restored. effectively remove all the screen definitions from it except for the new screen they have just defined. In this case you would need to restore the screens.jsn file(s) again. Note that aXes eXtensions that are to be used by all applications on this system should be placed in the axes/ts/screens folder of the target system, not to individual application folders. If the same aXes eXtension exists in the screens folder and the application folder, the eXtension in the application folder should take precedence but can not be guaranteed so you should check whick version is being used. Verify IE settings on every See Verify Internet Explorer Security Settings Verify IE PC from which RAMP-TS is in the RAMP-TS Guide. settings used.

### WEB-RAMP-TS, Step 4. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Updating changes to 5250 screen definitions	When you add new 5250 screens to your RAMP application or modify the features of an existing screen, these changes are reflected in the screens.jsn file(s) which you will need to redeploy.	Completely or selectively repeat the appropriate steps in this guide.
Backup and Recovery strategy	You should have a regular backup and recovery strat place for your target syste	<b>3</b> ,
Maintenance strategy	You should devise a strate deploying modifications you make to your VLF applicat	ou

## Check List/Planning Sheet => WEB-RAMP-NL

Use this check list in conjunction with Check List/Planning Sheet => WEB1.

- Overview
- WEB-RAMP-NL, Step 1. Pre-Requisite Actions and Other Considerations
- WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package
- WEB-RAMP-NL, Step 3. Add RAMP-NL Objects to the Deployment Package
- WEB-RAMP-NL, Step 4. Post-Requisite Actions and Other Considerations

\_\_1



#### **Overview**

This section shows how to configure RAMP-NL to automatically deploy newlook for the end-user when they first log on to the system. This approach eliminates the requirement for local manual installation and configuration, thereby simplifying deployment maintenance.

The following activities should be developed and thoroughly tested on your server.

These notes indicate the usage of newlook Version 8.0. The steps for other releases of newlook are similar.

#### About configuring the Web RAMP-NL Application to Automatically Deploy Newlook

To automatically deploy newlook you simply point your browser at a nominated web page. If the browser detects that newlook has not been installed on the PC, it will automatically initiate the newlook ActiveX download with no user interaction required other than perhaps an ActiveX download confirmation screen, after which newlook is invoked.

The client PC does not require any specific software other than Windows and Internet Explorer.

When the client accesses its first RAMP-NL screen, it will download the newlook files to the local PC. For subsequent access, the files previously installed will be used. Any updates that are made to the web server will be downloaded and installed as required. In other words, only those files that have been updated are downloaded and installed, as opposed to the complete package.

Note that the ActiveX control will always request its

incenses from the most, for newfook 0.0, a intechent incence . . . . . .

### WEB-RAMP-NL, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do It		ü
LANSA for the iSeries, LANSA for the Web, and Visual LANSA Framework installed on the IBM i server.	You require a functioning Visual LANSA Framework system running in order to be able to use RAMP-NL.			
Newlook installed on the development computer	You will need to start with an full installation of Newlook on your development computer.			
	A full installation means one that is installed from a newlook setup program and not a nlmain.cab file.			
Licensing requirements for the target system				
Establish the minimum supported configuration (MSC)	You need to formally define the minimum configuration your solution will viably support, including:  Minimum hardware requirements Minimum software requirements Supported screen resolutions Minimum networking		<ul> <li>A formal MSC will:</li> <li>Inform decisions about the overall solution cost</li> <li>Establish the environment required to test the deployme the solution or any patch/hotf made to it.</li> <li>Raise management's awarer of the risk in implementing a MSC" solution.</li> <li>For more information refer to</li> </ul>	

4	<ul><li>capabilities</li><li>Maximum data volumes.</li></ul>	Application Performance in the Framework Guide.

# WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package

These steps need to be completed to create RAMP-NL objects to be included in the deployment package created in check list WEB1.

- WEB-RAMP-NL, Step 2a. Create a RAMP\_Newlook folder in the Private Working Folder
- WEB-RAMP-NL, Step 2b. Copy newlook files to RAMP Newlook folder
- WEB-RAMP-NL, Step 2c. Create RAMP.cab file and copy it to the RAMP Newlook Folder

\_

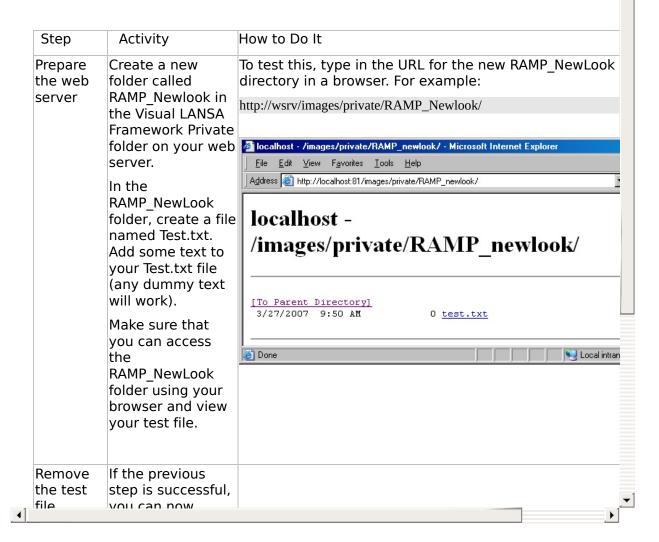
- WEB-RAMP-NL, Step 2d. Specify Codebase and Update File
- WEB-RAMP-NL, Step 2e. Test the Automated Web Deployment Package



VLF Deployment Check Lists > Check List/Planning Sheet => WEB-RAMP-NL > WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package

# WEB-RAMP-NL, Step 2a. Create a RAMP\_Newlook folder in the Private Working Folder

To deploy newlook automatically via the browser when running your RAMP-NL application, you will need to install some newlook objects onto your web server. The section recommends where to create a dedicated folder on your web server in which to place these objects. You must also confirm that the folder can be accessed via a browser as detailed below.





VLF Deployment Check Lists > Check List/Planning Sheet => WEB-RAMP-NL > WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package

## WEB-RAMP-NL, Step 2b. Copy newlook files to RAMP\_Newlook folder

A number of CAB files plus a file that tells the server what to download need to be placed into the RAMP\_Newlook folder on your web server.

Three of these files will need to be downloaded from the Look Software web site - please do not try to create these yourself. One reason for this is that these files are already digitally signed, so it will save you the problem of having to digitally sign them yourself. Also, these CAB files contain the information required to register the newlook AxtiveX on the target PC.

(There is one file, the RAMP.cab file, which you not download from the Look Software web site but will need to create yourself in the next step.)

Download	Access the	
the	http://www.looksoftware.com/cab80/	
standard	site and download the following	
cab files	files:	
	illes.	
from the	Newlook.cab	
Look		
Software	Nlmain.cab	
site	Nlupdate.nlu	
	Place these files in the new	
	RAMP NewLook folder on your	
	webserver.	
	webserver.	
Change	Rename Nlupdate.nlu to	
_	·	
the	Nlupdate.txt.	
NewLook	Note: Depending on your PC	
update	security settings, this file may have	
file	, , , , ,	
extension	downloaded as Nlupdate.nlu.txt.	
to tyt	The reason we do this is because	
		<b>)</b>

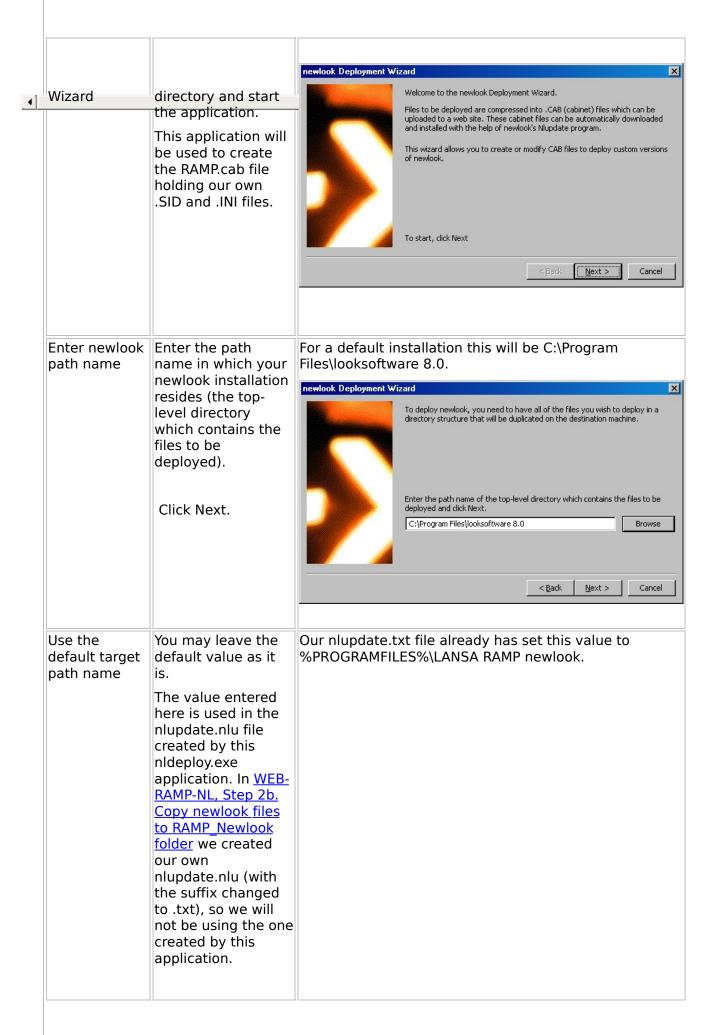
The reason we do this is because to .txt web servers recognize .txt files as safe, but may not recognize .nlu files as safe. Chances are that your users will encounter problems downloading the file if you leave the .nlu suffix. Change newlook's automated web The resulting file will look something like this: deployment is done by simply the [newlook] NewLook pointing the browser at a nominated Update=nlmain.cab,RAMP.cab update web page. newlookDir=%PROGRAMFILES%\LANSA RAMP file to When a browser detects that the newlook point to newlook software has not been the CAB installed on the PC, it will [nlmain.cab] files on automatically initiate the software Desc=newlook Program Files your web download and then invoke newlook Url=http://wsrv/images/private/RAMP\_newlook/nlmain.cab server within the web page. The information in the nlpudate.txt file [RAMP.cab] tells the system where to download Desc=newlook Configuration Files the newlook CAB files from. Url=http://wsrv/images/private/RAMP\_newlook/RAMP.cab Open Nlupdate.txt file and modify its contents as follows: Change all references to nlconfig.cab to RAMP.cab Change the newlookDir value to "%ProgramFiles%/LANSA RAMP NewLook" or another meaningful name. This will become the directory that newlook is loaded into on the target PC. Change the url values for the [nlmain.cab] and [RAMP.cab] cab files to reference where these files are located on your own web server. Save your changes.

VLF Deployment Check Lists > Check List/Planning Sheet => WEB-RAMP-NL > WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package

# WEB-RAMP-NL, Step 2c. Create RAMP.cab file and copy it to the RAMP Newlook Folder

The RAMP cab file will contain the newlook.sid and newlook.ini configuration files. These are unique to a particular application. You need to create this file yourself then move it onto the RAMP\_newlook directory on your web server.

Optionally Before you build Take a backup of the newlook, sid file as a precaut reduce the your cab files it is Close any newlook sessions size of recommended that Open a DOS prompt newlook.SID you compact the file newlook.SID file to Navigate to your newlook program files directory make deployment of To remove newlook developer features from the . newlook to the and build a new compacted .SID file type: target system faster. CHKSID -s newlook.SID Or if for some reason you want to retain the deve features but build a compacted sid file, type: CHKSID -r newlook.SID Press <Enter>. If you are asked whether you wish to delete corru items select 'Yes'. When the compression is comp the original file is backed up to a file of the same but with an extension of .BAK. Please test that your RAMP-NL application execut correctly after you have performed these steps a before you build the CAB files. Locate file To start click Next. Start the newlook nldeploy.exe in the newlook Deployment Wizard Deployment looksoftware 8.0 11/1-054 directory and start Welcome to the newlook Deployment Wizard.



VLF Deployment Check Lists > Check List/Planning Sheet => WEB-RAMP-NL > WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package

### WEB-RAMP-NL, Step 2d. Specify Codebase and Update File

You need to add You can do this by In the server definition in the Framework. specifying the codebase a reference to specify: the and update file: codebase: newlook.cab In the server RAMP NewLook/newlook.cab#version=8,0,0,( and definition or update file: RAMP\_NewLook/nlupdate.txt nlupdate.txt In the URL when files so that executing your your application Alternatively you can specify the codebase an application update file in the URL when executing the checks whether newlook is application using these parameters: alreadv +NLCODEBASE= installed on the +NLUPDATEFILE= user's PC, and if not. downloads it from the RAMP Newlook folder on your web server.

Note that prior to EPC831, the codebase and update file were specified by modifying the VF SY120.js file.

<u>•</u>

VLF Deployment Check Lists > Check List/Planning Sheet => WEB-RAMP-NL > WEB-RAMP-NL, Step 2. Create RAMP-NL Objects to be Included in the Deployment Package

### WEB-RAMP-NL, Step 2e. Test the Automated Web Deployment Package

Test the deployment on a PC that does not have newlook installed.

You should do the following test on a PC that does not have newlook installed on it.

**Warning:** The testing of a web RAMP-NL application automatically deploy newlook should NOT be done your development machine.

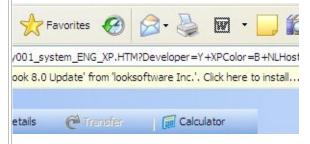
This is so to avoid overriding your development se as well as to avoid any confusion in the testing rais having a number of newlook environments installe one PC. You should begin your testing on a clean sthat does not have newlook installed.

Run your RAMP-NL application Enter the URL of your RAMP-NL application in a browser window on a PC other than your development PC. The test PC should not have newlook installed.

If newlook is installed on the PC, uninstall it and run the nlclean facility (see WEB-RAMP-NL, Step 4. Post-Requisite Actions and Other Considerations).

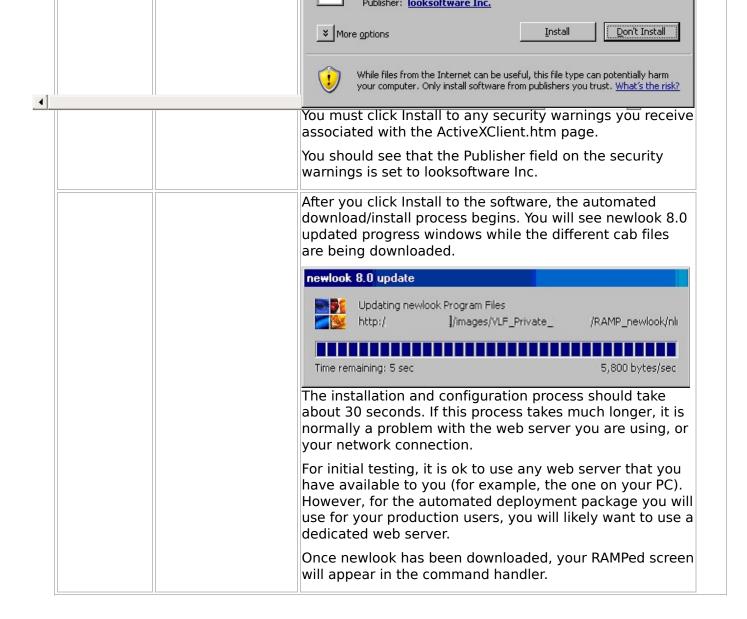
When you request a RAMPed screen for the first tir VF\_SY120.js will start the automated download and installation of newlook.

You will likely first be prompted as to whether or nowant to install the newlook ActiveX control. Click to any security warnings.



Follow the prompts that Internet Explorer displays Depending upon what version of Windows you are running, and certain other factors, you may receive couple of prompts asking you if it is ok to install the newlook ActiveX control.





Now proceed with WEB1, Step 2. Package the Deployment Material on the Source System.

#### WEB-RAMP-NL, Step 3. Add RAMP-NL **Objects to the Deployment Package**

from the RAMP Newlook folder

Include the files Include all the files in the RAMP Newlook folder files in the Bnn IFS save file.

- Nlmain.cab
- Newlook.cab
- Nlupdate.txt
- RAMP.cab

newlook.cab - This cab file hosts the newloo ActiveX control (nlocx.dll) and the update program (nlupdate.exe). Internet Explorer wi use this newlook.cab file to download and install the newlook ActiveX control if it is not already present on the user's PC.

nlmain.cab - This cab file hosts the bulk of tl newlook program files. It installs most of the files that would normally be installed by the setup wizard when you execute the setup program (i.e. nl80.exe).

nlupdate.nlu - This file tells the newlook update program (nlupdate.exe) where to install newlook to the user's PC, and where t get the cab files that will be used to install newlook and your customization files.

RAMP.cab - This file contains the newlook.sid and newlook.ini configuration files. These are unique to our particular application.

Note: The RAMP.cab contains objects that wi very likely change as you make changes to your system (for example if you identify new screens) so it will need to be redeployed afte changes to the RAMP-NL application.

Now proceed with WEB1, Step 2. Package the Deployment Material on the Source System.

<u>•</u>

### WEB-RAMP-NL, Step 4. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Backup and Recovery strategy	You should have a regular backup and recovery strategy in place for your target system.	
Maintenance strategy	You should devise a strategy for deploying modifications you make to your VLF applications	

Updating changes to newlook configuration files When you add new 5250 screens to your RAMPed application or modify the newlook features of an existing screen, these changes are reflected in the newlook.sid file which you will need to redeploy.

To do this, recreate the RAMP.cab files us exactly the same steps as described in <u>VRAMP-NL</u>, Step 2c. Create RAMP.cab file copy it to the RAMP\_Newlook Folder.

Note that even if only one of the files in RAMP.cab file changes, you should include the other files that you had the first time. This is so that the RAMP.cab file always contains all the files required by new and existing users.

Once the RAMP.cab file is recreated you move it to your RAMP\_NewLook directory your web server for immediate access to your user.

NOTE: Ensure that you implement this update at the same time as you implement your other related Visual LANSA Framew and RAMP updates.

Testing deployment of changes to newlook configuration files

You will very likely want to test your changes a number of times on the same PC - that is, run the reinstall several times.

Before you re-install, you need to remove the newlook files that have already been downloaded, and unregister the newlook Action (nlocx.dll) and ActiveX server (nlsvr.

To do so, perform the following steps:

1. Execute the niclean.exe utility on the test

PC. This can be obtained from ftp.looksoftware.com/distributor/tools/nlclean.exe Answer "Y" to each of the questions in the utility. 2. Delete the newlook web download folder from the testing PC. (if you have followed the naming conventions recommended in our notes, this would be the %Program Files%/LANSA Ramp newlook folder.) After doing this the RAMP application will realise that newlook needs to be installed again. There are a number The following is a possible approach that tests an of ways to test your initial installation then a subsequent modification: changes. Step 1: Working with a RAMPed application, perform the steps described in WEB-RAMP-NL. Step 2e. Test the Automated Web Deployment Package. Step 2: Using a new PC without newlook already installed, access the application with the appropriate URL. Ensure that you can run your RAMPed application. Step 3: Make some changes to the newlook.sid file to ensure that changes are downloaded. For example modify the look of one of your RAMPed screens (re-position the fields in newlook for example) and then perform the steps described in <u>Updating changes to newlook configuration</u> files. Access the URL again and check that the new newlook.sid file is downloaded and that the changes you made on the screen are shown. Step 4: You should probably also do a full test of the procedures involved in adding new functionality to the RAMPed application. Such a process could include creating a new business object that requires you to identify some new screens in newlook plus run through the choreographer to RAMP the new screens. With this test, you can ensure that both the newlook changes and the script are correctly loaded into the end-user's browser. NOTE: When testing for updates to newlook ensure that what is occurring is not a complete new installation but only the download of modified files.

### **Check List/Planning Sheet => WEB-NET**

Use this check list in conjunction with Check List/Planning Sheet => WEB1, Check List/Planning Sheet => WEB2A or Check List/Planning Sheet => WEB2B.

- Overview
- WEB-NET, Step 1. Pre-Requisite Actions and Other Considerations
- WEB-NET, Step 2. Create VLF.NET Objects to be Included in the Deployment Package
- WEB-NET, Step 3. Add VLF.NET Objects to the Deployment Package

**\_** 

- WEB-NET, Step 4. Install Microsoft's .NET Framework on end-user PCs
- WEB-NET, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

Any Framework Web Browser application can be compiled as a .NET executable. The VLF.NET feature supports all existing and new WAM filters and command handlers and all RAMP-NL screens and scripting.

This check list outlines the steps required to deploy a VLF.NET application.

### WEB-NET, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Ensure the VLF. NET feature is suitable for your circumstances	If the users are behind a proxy server that requires them to enter their username and password, the VLF.NET feature cannot be used.	
	This is a limitation of .NET ClickOnce deployment technology which does not currently support downloading of files through a proxy server that requires non-Windows integrated authentication.	

Establish
minimum
supported
configuration
(MSC)

You need to formally define the minimum configuration your solution will viably support, including:

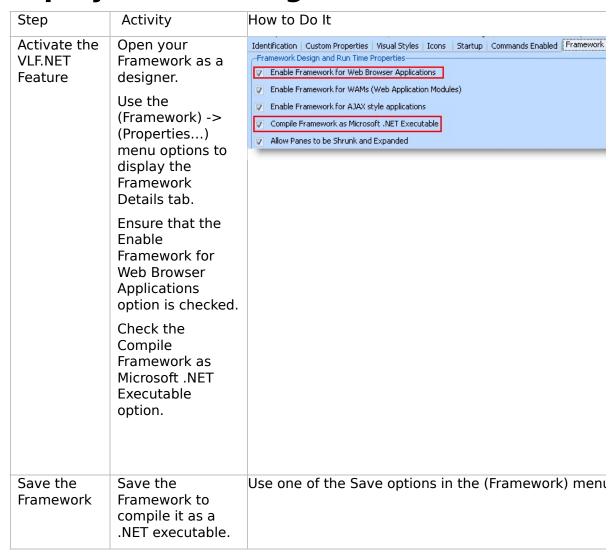
- Minimum hardware requirements
- Minimum software requirements
- Minimum networking capabilities
- Maximum data volumes.

#### A formal MSC will:

- Inform decisions about the overall solution cost
- Establish the environment required to test the deployment the solution or any patch/hotfix made to it.
- Raise awareness of the risk in implementing an "under the MS solution to the appropriate management level.

For more information refer to Application Performance in the Framework Guide.

# WEB-NET, Step 2. Create VLF.NET Objects to be Included in the Deployment Package



#### WEB-NET, Step 3. Add VLF.NET Objects to the Deployment Package

objects in the deployment package

Include VLF.NET When you save the framework with the VLF.NET feature activated, additional .NET files are created.

> There are four files per language, suffixed with:

- .application
- .exe.manifest,
- .framework.deploy
- .app.exe.deploy Add these files to your deployment package.

Also add the files VF\_WB001.HTM and VF MULTI YYY.js (where YYY is the language code). <u>•</u>

### WEB-NET, Step 4. Install Microsoft's .NET Framework on end-user PCs

Install Microsoft's .NET Framework on end-user PCs	Ensure that Microsoft's .NET Framework 2.0 (or later) and .NET Framework 2.0 Service Pack 1 is installed on end-user PCs.	
	If .NET Framework 3.5 has been installed, .NET Framework 2.0 Service Pack 1 does not need to be installed separately.	
	Some problems have been reported when installing .NET Framework 2.0 Service Pack 1 on Vista, in which case .NET Framework 3.5 will be have to be installed.	
	.NET 2.0 Software Development Kit (SDK) is not required.	

### WEB-NET, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Consider whether you need to set up or deploy any security certificates	See Digital Certificates in the Framework Guide.	
Backup and Recovery strategy	You should have a regular backup and recovery strategy in place for your target system.	
Maintenance strategy	You should devise a strategy for deploying modifications you make to your VLF applications	

## Check List/Planning Sheet => WIN1

- Overview
- WIN1, Step 1. Pre-Requisite Actions and Other Considerations
- WIN1, Step 2. Package the Deployment Material on the Source System
- WIN1, Step 3. Move the Deployment Material to the Target System
- WIN1, Step 4. Install the Deployment Material on the Target System

•

■ WIN1, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

This check list shows the steps required to deploy an application to a stand-alone Windows workstation with its own database.

In production environments this kind of deployment is unusual, but it is useful in the context of tutorials, demos and testing.

### WIN1, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do I	t	ü
Licensing requirements for the target system	None			
A Framework application ready for deployment	You need to have an version of your Fram application ready for deployment	iework	For more information see a Framework Version in the Framework Guide.	
Establish the minimum supported configuration (MSC)	minimum configurat solution will viably solution will viably solutions:  • Minimum hardworequirements • Minimum softworequirements • Supported screen resolutions • Minimum networeapabilities	<ul> <li>Minimum hardware requirements</li> <li>Minimum software requirements</li> <li>Supported screen resolutions</li> <li>Minimum networking</li> </ul>		ut the ment eployment tch/hotfix awarenes nting a "si er to in the

# WIN1, Step 2. Package the Deployment Material on the Source System

Follow these steps when your application is ready to be deployed.

Step	Activity How t	o Do It
Start the Deployment Tool	Logon to Visual LANSA and start the Deployment Tool.	Start Visual LANSA and logon to t partition containing the application be deployed.
		Ensure that you use a user profile which is authorized to the objects that are being deployed.
		From the Tools ribbon, select the Deploy button. The Visual LANSA Deployment Tool's main window open.
Create a Deployment Tool application	Create an application and a package using the Deployment Tool.	Click on the New Application butt on the tool bar or select the New command from the Application m
and package	Base the package on template called XALONE.	Fill in the application details.
		Click OK. You are prompted to crea Package. Fill in the package det and click OK.
		The Package Control Panel is displayed
Specify package settings	<ul> <li>Deploy System/Partition Definitions</li> </ul>	Click on the Package Settings bu on the toolbar to display the Pac Settings window.
	Omit Object Definitions	
	<ul> <li>Deploy LANSA Execution Environment</li> </ul>	
	<ul> <li>Deploy Execution Database Support</li> </ul>	
	Deploy Execution Add-Ons	

•	Deploy Execution Add-Ons	
•	Deploy with Component Support	

#### Specify the startup form

Enter the name of the start-up form in your application.

UF EXEC is the standard start-up form. Most likely you have created your own entry point form so specify its name.

Note that your entry point form needs to point to the correct Framework definition file. For more information see Deploying a Framework Version in the Framework Guide.

Double-click on the parameter Form to Execute (FORM=) in the Required Execution Parameters area.

#### Decide what execution parameters need to be prompted

If you want to prompt for a setup For example, to enable the Prompting parameter when the package is installed, enable the prompting by selecting the parameter and checking the Prompt during installation option.

of the Target Directory option, double-click the parameter and select the Prompt during SETUP check box in the window which is displayed.

#### Add LANSA programs

Add all the LANSA programs in your application.

Add forms starting with FP \*, UF\_\* and VF \*.

Add reusable parts starting with FP\_\*, UF\_\* and VF\_\*.

, (If you want to be able to run the demonstration system, include all forms and reusable parts starting with DF \* and process DF\_PROC, and the \*.htm, \*.bmp and \*icon files required.)

Include process VF PR001, VF PROX1 and UF SYSBR with all their functions.

Click on the Select Repository Objects button. Drag the objects you want to include to the area on the right.

Then select all the objects on the right and select the Cross-Reference icon above the selected components. A new dialog will open to allow you to select the cross-reference settings.

Ensure all required object types are selected

## WIN1, Step 3. Move the Deployment Material to the Target System

Step	Activity	How to Do It
Move the deployment us.msi) in the package folder (\X_WIN95\X_LANSA\x_apps\packagename\) to the required destination media such as CD, network server etc.		deros\packagename\)
	(Note: Do not copy the endirectory.)	tire package

**→** 

# WIN1, Step 4. Install the Deployment Material on the Target System

Step	Activity	How to Do It
Install the deployment material	Install the package by do clicking the package .MSI The setup program auton launches the Framework. the Framework is first lau executable files are copie the Framework is displayed.	file. natically When nched d and
	The application is ready t used.	o be
	If you encounter problem the installation, check the MSI*.log file in the end us defined %TEMP% folder, the example: MSI2ce4c.log.	er's
	As well as installing the Application, a standard W program menu folder will created for each Applicat using the Company and Application descriptions a names. This means that e Application built with the Company details and instance the same PC will be group together.	be on as folder every same alled on

**→** 

### WIN1, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Security considerations	Consider setting some important files as read-only security reasons.	y for
	For example, deployed sys XML definition files should to read-only to prevent enusers from accidentally ed the content of the file.	be set d-
Backup and Recovery strategy	You should have a regular backup and recovery strate place for your target system	J.
Maintenance strategy	You should devise a strated deploying modifications yo make to your VLF applicati	u

# **Check List/Planning Sheet =>** WIN2

- Overview
- WIN2, Step 1. Pre-Requisite Actions and Other Considerations
- WIN2, Step 2. Package the Deployment Material on the Source System
- WIN2, Step 3. Move the Deployment Material to the Target System
- WIN2, Step 4. Install the Deployment Material on the Target System

\_ [ •

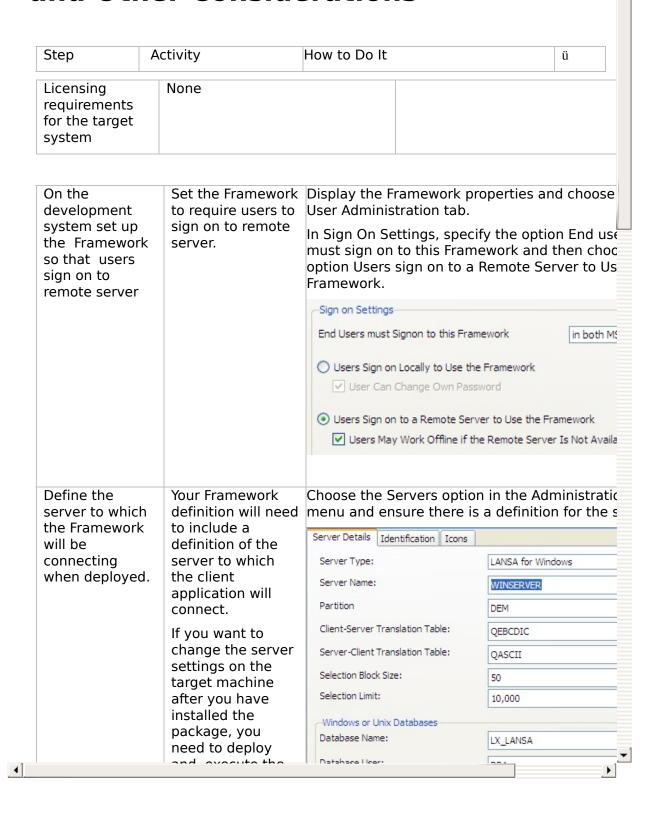
■ WIN2, Step 5. Post-Requisite Actions and Other Considerations

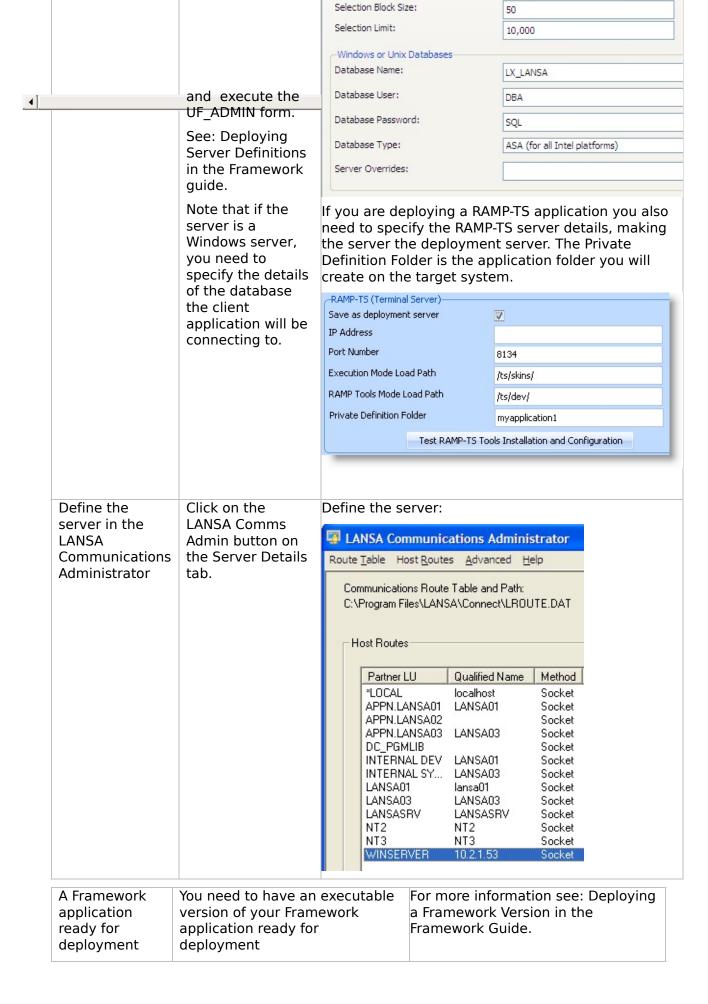


#### **Overview**

This check list shows the steps required to deploy the client part of a Framework rich client/server application to a workstation that will access an IBM i or Windows remote data server.

### WIN2, Step 1. Pre-Requisite Actions and Other Considerations





# WIN2, Step 2. Package the Deployment Material on the Source System

Follow these steps when your application is ready to be deployed.

Step	Activity	How to Do It
Start the Deployment Tool	Logon to Visual LANSA and the Deployment Tool.	Start Visual LANSA and logon to t partition containing the application be deployed.
		Ensure that you use a user profile which is authorized to the object that are being deployed.
		From the Tools ribbon, select the Deploy button. The Visual LANSA Deployment Tool's main window open.
Create a Deployment Tool application	Create an application and package using the Deployi Tool.	
and package	Do not use any template.	Fill in the application details.
		Click OK. You are prompted to crea Package. Fill in the package det and click OK.
		The Package Control Panel is displayed
Specify package settings	Deploy to Client Witho Local Database	on the toolbar to display the Pac Settings window.
_	<ul> <li>Deploy System/Partition</li> <li>Definitions</li> </ul>	on
	Omit Object Definition	S
	Deploy LANSA Executi     Fourteement	on

1		<ul> <li>Environment</li> <li>Deploy with Component Support</li> <li>Deploy LANSA Communications</li> </ul>	•
	Configure the application to use remote database	Because you are deploying for access to a remote database, you must configure the application not to use a specific database. In the Database section, set the database options to No and specify the DBMS Type (DBUT=) as No Database.	Double-click on the DBMS Type (DBUT=) parameter.
	Define the connection behavior	Accept the defaults in the Communications and SuperServer sections.	
	Specify the startup form	Enter the name of the start-up form in your application.  UF_EXEC is the standard start-up form. Most likely you have created your own entry point form so specify its name.  Note that your entry point form needs to point to the correct Framework definition file. For more information see Deploying a Framework Version in the Framework Guide.	Double-click on the parameter Form to Execute (FORM=) in the Required Execution Parameters area.
	Decide what execution parameters need to be prompted	If you want to prompt for a setup parameter when the package is installed, enable the prompting by selecting the parameter and checking the Prompt during installation option.	For example, to enable the Prompting of the Target Directory option, double-click the parameter and select the Prompt during SETUP check box in the window which is displayed.

# WIN2, Step 3. Move the Deployment Material to the Target System

Step	Activity	How to Do It	
Move the deployment material to the target system	us.msi) in the pac (\X_WIN95\X_LAN to the required de CD, network serve	SA\x_apps\packagename\) estination media such as	

**→** 

# WIN2, Step 4. Install the Deployment Material on the Target System

Warning: Do not test your deployment package on your development system.

Step	Activity	How to Do It
Server system is set up	Before you start installing client deployment package must have deployed the side of the application.	e you
Listener	Make sure you have a listerunning on the server.	ener
Install the deployment	Install the package by dou clicking the package .MSI	
material	The setup program autom launches the Framework. the Framework is first laur executable files are copied the Framework is displayed.	When niched and
	The application is ready to used.	o be
	If you encounter problems the installation, check the MSI*.log file in the end us defined %TEMP% folder, f example: MSI2ce4c.log.	er's
	As well as installing the Application, a standard W program menu folder will created for each Applicati using the Company and Application descriptions a names. This means that e Application built with the Company details and instalthe same PC will be group	be on s folder very same alled on

4		together.	<b>)</b>
	Optionally install RAMP-NL	If you are installing a RAMP-NL application, follow the steps in WIN-RAMP-NL, Step 3. Install the Deployment Material on the Target System.	
	If you are deploying a RAMP-TS application, verify IE settings		See Verify Internet Explorer Security Settings in the RAMP-TS Guide.

### WIN2, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Security considerations	Consider setting some important files as read-on security reasons.	y for
	For example, deployed system XML definition files should to read-only to prevent enusers from accidentally extra the content of the file.	be set d-
Backup and Recovery strategy	You should have a regular backup and recovery strate place for your target syste	
Maintenance strategy	You should devise a strate deploying modifications you make to your VLF applicat	ou

# Check List/Planning Sheet => WIN3

- Overview
- WIN3, Step 1. Pre-Requisite Actions and Other Considerations
- WIN3, Step 2. Package the Deployment Material on the Source System
- WIN3, Step 3. Move the Deployment Material to the Target System
- WIN3, Step 4. Install the Deployment Material on the Target System

\_ [ •

■ WIN3, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

This check list shows the steps required to deploy the server part of a Framework rich client/server application to an IBM i server.

### WIN3, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do	lt	ü
Licensing requirements for the target system	Super Server License		ed more information, see w.lansa.com/support/licer	nsing/index.
Establish the minimum supported configuration (MSC)	You need to formally minimum configurati solution will viably suincluding:  Minimum hardwarequirements  Minimum softwarequirements  Supported screeresolutions  Minimum network capabilities  Maximum data	on your ipport, are re n rking	<ul> <li>A formal MSC will:</li> <li>Inform decisions ab overall solution cost</li> <li>Establish the environ required to test the of the solution or any post made to it.</li> <li>Raise management of the risk in implement MSC" solution.</li> <li>For more information reapplication Performance Framework Guide.</li> </ul>	onment deployment atch/hotfix 's awarenes enting a "si

#### WIN3, Step 2. Package the **Deployment Material on the Source System**

Step	Activity	How to Do It
Assign a build number	Assign a build number nn version of your product be released. This number will used in the following steps file naming convention.	eing I be

Include your
own non-
LANSA objects

If your application contains non-LANSA objects, create save files containing them. Non-LANSA objects are:

- **RPG Programs**
- **DDS Files**
- **Cobol Programs**
- DB2 files
- Data Areas
- **Data Queues**

Create as many IBM i save files named Bnn OM1, Bnn OM2, etc required to contain other non-LA IBM i objects.

Save all non-LANSA objects into Bnn OM1, 2, 3 ... n save files file using the SAVOBI command.

#### Add LANSA programs

Add some LANSA VLF internal programs in your application.

Include function VFU0038 from process VF PR001.

Include process UF SYSBR and all its functions. The functions will be named like UFUnnnn.

If you have created your own IIP functions and snapped them into your Framework, do not forget to include them.

Use the option Add process/functi to the list in the Work with Export menu to make sure these objects included in the export list.

4			See WIN-RAMP-TS, Step 2. Prepare
	TS objects	more files to the deployment	Your RAMP-TS Screen Definitions for Deployment.
		package.	

Create an IBM i Export List	Create a LANSA export list named Bnn_ALL.	Use the option Work with lists of objects to be exported of the LANSA Housekeeping menu to create the export list.
Include your own server- side LANSA objects in the export list	Include your own server-side LANSA objects if any.	Use the options in the Work with Export List menu to make sure all the objects used in your application are included in the export list.
Include save files in the export list	Include the save files you have created in the export list	Use option Add other/non-LANSA objects to the list. Use F20 to find the files.

Add Framework Files	If the end-user will be storing user information in DBMS tables VFPPF06/07, you need to include them.  If you are using code tables, include the code table data files FPTAB and FPTABU.	Use the option Add other/non-LANSA object to the list. Use F20 to find the files.
Include file data	Include data in the files you have selected.  Note that you would not normally ship all the development user data in tables VFPPF06/07.  However, if no one in the target environment can use UF_DESGN, and the Framework is deployed with security switched on, you might ship the user files containing a single administrative user. A profile for that administrator would have to exist already or be created on the target server.  If a user at the target environment has access to UF_DESGN, the files can be shipped without data, and the person with UF_DESGN can enroll the administrator in VFPPF06/07. From then on the administrator	

# WIN3, Step 3. Move the Deployment Material to the Target System

There are many ways to physically deploy the Bnn\_ALL save file:

- Tape for IBM i
- CD for an IBM i
- CD for a PC
- E-mail
- Web site download

# WIN3, Step 4. Install the Deployment Material on the Target System

Step	Activity	How to Do It
Install LANSA for the iSeries on the target IBM i server	From the LANSA CD install LANSA for the iSeries.  Note that the LANSA syste to be on the same version EPC level as the system or which the deployment mat was created.	and
Import deployment material to the application server	Use LANSA's import facilit install everything from the file Bnn_ALL to the approp partition on the target ma	save this partition of the LANSA Housekeeping menu. Check t
Restore RAMP- TS objects	If you are deploying a RAM application, you need to rethe RAMP-TS objects.	
Restore the non-LANSA objects	If your application contains LANSA objects, restore everything from the Bnn_C files into the appropriate II library on the target system	Mn BM i
Verify the software installation was	Check the import job logs errors and warnings. If you encounter any errors or w you should resolve them b	arnings

4	If you have any applications that can be run in 5250 then you may test them now. If not, you will need to test everything when the Clients are set up.	<b>)</b>	

### WIN3, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Dooleyn and	You should have a regular	
Backup and Recovery strategy	You should have a regular backup and recovery straplace for your target systems	tegy in
Maintenance strategy	You should devise a strate deploying modifications y make to your VLF applica	ou

# Check List/Planning Sheet => WIN4

- Overview
- WIN4, Step 1. Pre-Requisite Actions and Other Considerations
- WIN4, Step 2. Package the Deployment Material on the Source System
- WIN4, Step 3. Move the Deployment Material to the Target System
- WIN4, Step 4. Install the Deployment Material on the Target System

\_ [ •

■ WIN4, Step 5. Post-Requisite Actions and Other Considerations



#### **Overview**

This check list shows the steps required to deploy the server part of a Framework rich client/server application to a Windows server.

### WIN4, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do	lt	ü
Licensing requirements for the target system	Super Server License		ed more information, see w.lansa.com/support/licens	sing/index.
Establish the minimum supported configuration (MSC)	You need to formally minimum configurati solution will viably suincluding:  Minimum hardwarequirements  Minimum softwarequirements  Supported screeresolutions  Minimum networcapabilities  Maximum data with the solution of	on your upport, are re n rking	<ul> <li>A formal MSC will:</li> <li>Inform decisions abooverall solution cost</li> <li>Establish the enviror required to test the dother solution or any paramade to it.</li> <li>Raise management's of the risk in implement MSC" solution.</li> <li>For more information reference Application Performance Framework Guide.</li> </ul>	nment eployment stch/hotfix s awarenes enting a "si

# WIN4, Step 2. Package the Deployment Material on the Source System

Follow these steps when your application is ready to be deployed.

Step	Activity	How to Do It
Start the Deployment Tool	Logon to Visual LANSA an the Deployment Tool.	d start Start Visual LANSA and logon partition containing the applic be deployed.
		Ensure that you use a user prowhich is authorized to the objection that are being deployed.
		From the Tools ribbon, select to Deploy button. The Visual LAN Deployment Tool's main windo open.
Create a	Create an application and	
Deployment Tool application	package using the Deploy Tool.	ment on the tool bar or select the N command from the Application
and package	Use the XSRVOTH templat	te. Fill in the application details.
		Click OK. You are prompted to a Package. Fill in the package and click OK.
		The Package Control Panel is displayed
Configure the database	Specify database options required.	as •
Choose	Choose the Desktop setting	
Desktop	depending on your prefere	ences. these options:

settings		<ul> <li>Create Communications</li> </ul>
		<ul><li>Administration Shortcut</li><li>Create ODBC Administration Shortcut</li></ul>
Decide what execution parameters need to be prompted	If you want to prompt for a setup parameter when the package is installed, enable the prompting by selecting the parameter and checking the Prompt during installation option.	For example, to enable the Promp of the Target Directory option, double-click the parameter and se the Prompt during SETUP check b in the window which is displayed.
Add LANSA programs	Add some LANSA VLF internal programs in your application. Include function VFU0038 from	Click on the Select Repository Obj button. Drag the objects you wan include to the area on the right.
	process VF_PR001.  Include process UF_SYSBR and all its functions. The functions will be named like UFUnnnn.	Then select all the objects on the right and select the Cross-Referention above the selected compone A new dialog will open to allow yo select the cross-reference settings
	If you have created your own IIP functions and snapped them into your Framework, do not forget to include them.	Ensure all required object types a selected
Add Framework Files	If the end-user will be storing user information in DBMS tables VFPPF06/07, you need to include them.	Click Files. Select the files and click OK.
	If you are using code tables, include the code table data files FPTAB and FPTABU.	
Include vous	Add your converbeed abjects	Click on the Select Depository Ohi
Include your server-based	Add your server-based objects, including multilingual text	Click on the Select Repository Obj button on the toolbar.
objects	variables, system variables, message files, files, processes, functions and images used in the application.	Ensure that all non-LANSA objects have correct installation paths specified for the target machine.
Include file data	Include data in the files you have selected.	Select all files and click on the Include File Data button.

## WIN4, Step 3. Move the Deployment Material to the Target System

Step	Activity	How to Do It
Move the deployment material to the target system	Copy the msi file (package us.msi) in the package fole (\X_WIN95\X_LANSA\x_app to the required destination CD, network server etc.	deros\packagename\)
	(Note: Do not copy the endirectory.)	tire package

**→** 

## WIN4, Step 4. Install the Deployment Material on the Target System

Step	Activity	How to Do It
Set up the Framework user as a Windows user	You need to set up a valid Windows user and password on the target Windows server which will be used by the client application to sign on to the Framework.	
	If you are using Framework Users and Authority, the same userid and password must also be defined in the Framework.	
	Note that Windows passwords are <b>case sensitive</b> even though Framework passwords are not. You need to remember this when logging on to Framework because your password will be checked by the target Windows server.	

Install the deployment material		Install the package by double- clicking the package .MSI file.
	material	The setup program automatically launches the Framework. When the Framework is first launched executable files are copied and the Framework is displayed.
		The application is ready to be used.
		If you encounter problems during the installation, check the MSI*.log file in the end user's defined %TEMP% folder, for

	example: MSI2ce4c.log.	<u> </u>
	As well as installing the Application, a standard Windows program menu folder will be created for each Application using the Company and Application descriptions as folder names. This means that every Application built with the same Company details and installed or the same PC will be grouped together.	
Apply server license	A server license needs to be applied to the server system.	
Test the server	Test that your server is correctly set up.	Execute a form that connects to the server from a client PC.
		If there are any errors, inspect the x_err.log file on the server.

### WIN4, Step 5. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Backup and Recovery strategy	You should have a regular backup and recovery stra place for your target systems.	tegy in
Maintenance strategy	You should devise a strated deploying modifications your VLF applica	ou

## Check List/Planning Sheet => WIN-RAMP-TS

Use this check list in conjunction with Check List/Planning Sheet => WIN3 when you are deploying a Windows RAMP-TS client to an IBM i server.

- Overview
- WIN-RAMP-TS, Step 1. Pre-Requisite Actions and Other Considerations
- WIN-RAMP-TS, Step 2. Prepare Your RAMP-TS Screen Definitions for Deployment
- WIN-RAMP-TS, Step 3. Install your RAMP-TS Screen Definitions at the Deployment Target
- WIN-RAMP-TS, Step 4. Post-Requisite Actions and Other Considerations

**\_** 



#### **Overview**

This check lists shows you how to include your RAMP-TS objects in a deployment package created as per the instructions in Check List/Planning Sheet => WIN3.

### WIN-RAMP-TS, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do It	ü
Licensing requirements for the target system	Axes-TS needs to be licensed on the target IBM i server.		

Establish the minimum supported configuration (MSC)	You need to formally define the minimum configuration your solution will viably support, including:  Minimum hardware requirements  Minimum software requirements  Supported screen resolutions  Minimum networking capabilities  Maximum data volumes.	<ul> <li>A formal MSC will:</li> <li>Inform decisions about the overall solution cost</li> <li>Establish the environment required to test the deployment the solution or any patch/hotfix made to it.</li> <li>Raise management's awarenes of the risk in implementing a "si MSC" solution.</li> <li>For more information refer to Application Performance in the Framework Guide.</li> </ul>
-----------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# WIN-RAMP-TS, Step 2. Prepare Your RAMP-TS Screen Definitions for Deployment

In your development environment your RAMP-TS screen definitions are kept in the Axes Screens folder, typically named \aXes\ts\screens. If you used Private Definition Folder(s) to segment your screen definitions, these will appear as sub-folders of the Axes screens folder.

Step	Activity	How to Do It
Check definition files	Check that any example or testing static or dynamic table definitions have been removed from the respective definition files.  These would typically be unused in the application now and may fail if they are deployed to a production environment.	Open the Tables_Static.txt and Tables_Dynamic.txt files in your private you have one, or the axes\ts\screens fo and remove any table definitions that a required.
Add aXes files to a save file	Copy these files from your development Axes screens folder and/or any associated private definition to a save file:  • application_definition.css (plus application_definition_*.css) • application_definition.js • Extension_*.js • screen_*.js • screen_*.js • screens.jsn • Tables_Static.txt • Tables_Dynamic.txt • Userenv.js • *.xml Note that some of these files may not exist in your system. Also include the uf_sy420_rts.js	First create a save file using the CRTSAVI command, and then use the IBM i save c to save the files to the save file.  For example this command saves the cothe /axes directory to a save file:  SAV DEV('/qsys.lib/savefilelib.lib/RAMPTSF.file' OBJ(('/axes'))  This command saves the contents of /ax/axesdemo directory:  SAV DEV('/qsys.lib/savefilelib.lib/RAMPTSF.file' OBJ(('/axes') ('/axesdemo'))  This command saves the required files ir private folder to a save file:  SAV DEV('/QSYS.lib/QGPL.lib/RAMPTSF.file')  OBJ(('/axes/ts/screens/MyFolder/application_defin ('/Axes/ts/screens/MyFolder/application_definition.

	file if your application uses shared scripts. This file is located in the ts/skins folder or your private definition folder.  If the application is to be displayed in a language other than English, the modified text files, Texts_Cust_*.txt also need to be deployed.  Files named like N.scn represent a single 5250 screen definition. Normally these files are only used while doing RAMP-TS development and do not need to be deployed to execution/run time target systems. You would only include these files in the deployment package if you want to allow people in the target environment to modify screen definitions.	('/Axes/ts/screens/MyFolder/Extension_*.js')  ('/Axes/ts/screens/MyFolder/screen_*.js')  ('/Axes/ts/screens/MyFolder/screens.jsn')  ('/Axes/ts/screens/MyFolder/Tables_*.txt')  ('/Axes/ts/screens/MyFolder/Userenv.js')  ('/Axes/ts/screens/MyFolder/*.xml')  ('/Axes/ts/skins/uf_sy420_rts.js')) TGTRLS(V5R3M0)  If you wish to enter this command freehand from the command line, use CALL QCMD. Pressing F11 from within QCMD will provide you with space to enter the SAV command with many objects.
Continue building the server package.	Return to Check List/Planning Sheet => WIN3.	

# WIN-RAMP-TS, Step 3. Install your RAMP-TS Screen Definitions at the Deployment Target

Step	Activity	How to Do It
·	_	
Install Axes- TS on the target computer	Axes-TS needs to be installed on the target IBM i server.	See Install and Configure RAMP-TS/aXes-TS on i Server.
Create application folder	On the target system, create an application folder as a subfolder of the \axes\ts\screens folder using the ibm i CRTDIR command.	The name of the folder can contain only letter the English alphabet or numbers, no blanks.  For example to create folder MyApplication1 ir \axes\ts\screens\ folder:  CRTDIR DIR('axes\ts\screens\myapplication1')
Set authorities	Use the IBM i WRKLNK command and make sure that folder MyApplication1 has *R rights for user *PUBLIC and no other rights.	Use WRKLNK OBJ('axes\ts\screens\ MyApplicat then use option 9=Work with authority to disp alter the authority to folder MyApplication1.
Load tables	SQL commands may be used to load any static or dynamic tables in your application.  Check that the user the aXes server is executing under has READ authorisation to any required SQL/database tables.	The commands execute under the user profile the aXes server is executing under.  You should authorise that user profile for read to the SQL tables required for this purpose. Th does not need any rights to other data base to that may be on the system.
Deploy the save file containing the aXes definitions	On the target system, use the IBM i RST command to restore the aXes files into the target system's	To restore the save file use a command like this RST DEV('/qsys.lib/v11vlflib.lib/ramptsf.file') OBJ(('/Axes/ts/screens/MyFolder' *INCLUDE '/axes/ts/screens/myapplication1'))

to the target system

application folder.

Warning: The restored screens.jsn file(s) contains all your RAMP-TS screen definitions.

If someone on the target system starts Axes as a developer/designer and attempts to identify a screen and save the definition, they will cause the screens.jsn file to be (re)published. This will effectively remove all the screen definitions from it except for the new screen they have just defined. In this case you would need to restore the screens.jsn file(s) again.

Note that aXes eXtensions that are to be used by all applications on this system should be placed in the axes/ts/screens folder of the target system, not to individual application folders.

If the same aXes eXtension exists in the screens folder and the application folder, the eXtension in the application folder should take precedence but can not be guaranteed so you should check whick version is being used.

The DEV parameter specifies the name and path of the save file.

The OBJ parameter specifies:

- First the folder from which the files were saved from
- \*INCLUDE the objects that match the object name pattern
- Lastly the folder on the target system to which the files are to be restored.

Verify IE settings

Verify IE settings on every PC from which RAMP-TS is used. If these settings are not correct, you will get an error like this:



### WIN-RAMP-TS, Step 4. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Updating changes to 5250 screen definitions	When you add new 5250 screens to your RAMP application or modify the features of an existing screen, these changes are reflected in the screens.jsn file(s) which you will need to redeploy.	Completely or selectively repeat the appropriate steps in this guide.
Backup and Recovery strategy	You should have a regular backup and recovery strat place for your target syste	9.
Maintenance strategy	You should devise a strate deploying modifications you make to your VLF applicat	ou

## Check List/Planning Sheet => WIN-RAMP-NL

Use this check list in conjunction with Check List/Planning Sheet => WIN2 when you are deploying a Windows RAMP-NL client to an IBM i server (check list WIN3).

- Overview
- WIN-RAMP-NL, Step 1. Pre-Requisite Actions and Other Considerations
- WIN-RAMP-NL, Step 2. Add RAMP-NL Objects to the Deployment Package
- WIN-RAMP-NL, Step 3. Install the Deployment Material on the Target System
- WIN-RAMP-NL, Step 4. Post-Requisite Actions and Other Considerations

**\_** 



#### **Overview**

This check lists shows you how to include your RAMP-NL objects in a Windows client package created as per the instructions in Check List/Planning Sheet => WIN2.

### WIN-RAMP-NL, Step 1. Pre-Requisite Actions and Other Considerations

Step	Activity	How to Do It	ü
Licensing requirements for the target system  Establish the minimum supported configuration (MSC)	Newlook liteclient lice to be applied to the application server. No required on the client solution will viably surincluding:  Minimum hardworequirements  Minimum software	define the ion your upport,	A formal MSC will:  Inform decisions about the overall solution cost  Establish the environment required to test the deployment the solution or any patch/hotfix made to it.
	requirements  Supported screet resolutions  Minimum netwo capabilities  Maximum data	en rking	<ul> <li>Raise management's awarenes of the risk in implementing a "su MSC" solution.</li> <li>For more information refer to Application Performance in the Framework Guide.</li> </ul>

### WIN-RAMP-NL, Step 2. Add RAMP-NL Objects to the Deployment Package

Perform these steps to include RAMP-NL objects in the client package created as per the instructions in check list WIN2.

Step	Activity	How to Do It
Include RAMP- NL non-LANSA objects	Include these objects from the partition execute directory of the RAMP-NL development PC:  VF_SY001_Nodes.XML  VF_SY001_Nodes_*.JS (there will be one file for every application session)  VF_SY120.JS  VF_SY120.HTM  UF_SY120.JS	Bring up the Other Objects tab.  Double-click Non-LANSA Objects to bro for the objects.  Locate and select the objects and click
Include newlook customization files	Also, include these objects from the newlook program directory (usually Program Files/looksoftware 8.0) as Non-LANSA objects:  Newlook.SID Newlook.INI VF_XP*.nlg file(s) Any other custom files specific to you NewLook configuration (for example, images that you have added)	Bring up the Other Objects tab.  Double-click Non-LANSA Objects to brofor the objects.  Locate and select the objects and click
Include the NL80.exe object or include newlook program files in	You have the option of including NL80.exe file to be able to manually install newlook on the target PCs, or you can include newlook program files in the package so that newlook is installed	Locate the NI80.exe newlook installatic application and include it as a Non-LAN object.  If you do not already have a copy of th you may download it from the Look Software web site.  Or

4	the RAMP-NL	automatically with the	Package newlook with RAMP-NL.
	package	package.	
		If you install newlook manually using the offical newlook installation program NL80.exe, your deployment will require less testing, but you will have to perform two distinct installations on every PC.	
	Continue packaging the deployment materials	Continue with the steps in WIN2, Step 2. Package the Deployment Material on the Source System.	

■ Package newlook with RAMP-NL

VLF Deployment Check Lists > Check List/Planning Sheet => WIN-RAMP-NL > WIN-RAMP-NL, Step 2. Add RAMP-NL Objects to the Deployment Package

#### Package newlook with RAMP-NL

This section describes how to package newlook application files in the RAMP-NL package.

Step	Activity	How to Do It
Ensure newlook is installed and configured correctly on the PC on which you will build the package	Make sure you have newlook 8 installed on the PC where you are going to build the deployment package.  Ensure this is the version you want to deploy to your users' PCs.	
Download the newlook Auto Configuration Program	This program will silently register the newlook ActiveX components and create the required newlook registry keys on the target PC.	Download it into your newlook directory (C:\8.0) from: http://chiweb.lansa.com/public/newlook/Sup
Add newlook objects	Add all of the files from the root of your newlook directory (usually C:\Program Files\looksoftware 8.0) to the list of Non-LANSA Objects within your package.  Also add all of the files from the newlook Tables directory (C:\Program Files\looksoftware 8.0\Tables).  Do not include objects from any other newlook subdirectories.	Click on the Objects button from the Deploy Then double-click on Non-LANSA Objects on the looksoftware 8.0 directory and select all Repeat the steps to include all the files in th directory.  If you have added other files to the looksoft specific to your RAMP-NL application, add th your users will be using printer emulation sefrom the Printers directory.

Set the installation path for newlook program files

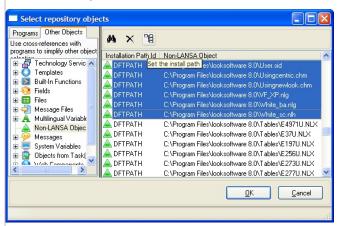
4

Specify the directory to which to install the newlook files on the target PC.

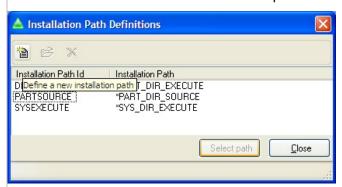
For example:

C:\Program
Files\Application
Name\newlook
directory

Highlight all of the files that have been included from the looks root directory, then click the Set the Install Path button on the



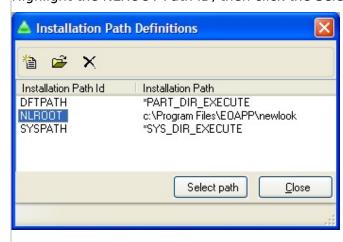
Now click the Define a new installation path button on the tooll



Set the Installation Path ID field to NLROOT. Set the to C:\Program Files\Application Name\newlook, then click OK.



Highlight the NLROOT Path ID, then click the Select Path



# WIN-RAMP-NL, Step 3. Install the Deployment Material on the Target System

If you have included all newlook program files in the package (see <u>Package newlook with RAMP-NL</u>), newlook and RAMP-NL will be automatically installed.

If you want to install newlook manually, follow these steps:

Warning: Do not test your deployment package on your development system.

Step	Activity	How to Do It
Verify Newlook is installed	If newlook is not already installed on the workstation, locate the nl80.exe which will now be located in the partition execute directory (for example, X_WIN95/X_LANSA/X_DEM/EXECUTE/)	
	Run this application to install newlook.	
Copy RAMP- NL files to the Newlook directory	When newlook is installed, copy the following files from the partition execute directory to the newlook directory (this will be Program Files/looksoftware 8.0 directory if you accepted the default settings):	
	<ul><li>Newlook.SID</li><li>Newlook.INI</li><li>VF_XP*.nlg file(s)</li></ul>	

Note: Ensure that the signon screen on the target IBM i server matches the signon screen on the development system. If you have used the username and password fields to identify the screen, they are usually in the same position on the screen. If they are not, you will need to define a

on the screen. If they are not, you will need to define a newlook screen override for the signon screen on the target system.

### WIN-RAMP-NL, Step 4. Post-Requisite Actions and Other Considerations

Step	Activity	How to Do It
Backup and Recovery strategy	You should have a regular backup and recovery strate place for your target systems.	egy in
Maintenance strategy	You should devise a strate deploying modifications y make to your VLF applica	ou