

# vSpace Server Management Console

**User Manual** 



# **TABLE OF CONTENTS**

3
. 3
. 3
3
Δ
: 4
. 5
6
7
8
9
11
13
13
14
15
16
16
<u>1</u> 9
18
19
20
21
23
24
25
26
27
27
28
20
30
30
31
32
.32
. 33
.34

# **1.0 Getting Started**

Before beginning, make sure you've downloaded and installed the latest version of vSpace for your selected operating system. For the purpose of this document we will be using **vSpace 6** in conjunction with the **L300** and **M300** access devices. Older versions of vSpace may contain variations in console layout and features, but many of the same concepts and terms will apply. While certain examples given herein highlight the L-series specifically, it should be noted that the L-series and M-series share nearly identical configuration options.

## 1.1 Installing vSpace

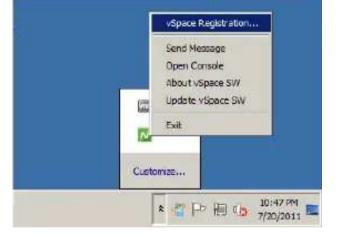
Computing

Begin by going to <u>www.ncomputing.com/softwaredownload</u> and downloading the latest version of vSpace. Once the download is complete, launch the vSpace installer and proceed through the guided install process. Be sure to reboot your host once the installation process is complete.

### **<u>1.2 Registering vSpace</u>**

Once vSpace is installed, register the host software by right-clicking on the NComputing icon in your system tray and selecting "vSpace Registration," as shown in the image to the right.

This will launch the Registration Utility and you will be guided through the remainder of the registration process.



#### **1.3 Connecting Your Devices**

vSpace is now ready to accept connections from L and M-series devices. Keep in mind that, by default, your devices will automatically look for vSpace hosts on their designated subnet. You can alter this behavior from the devices themselves or from within the NC Console **(6.4 Connections Tab)** at any time.

Depending on your selected operating system, further configuration steps may be required for the OS itself (such as adjusting Local Policies or User Groups). Be sure to review our general deployment checklist to ensure that your environment is properly configured to facilitate device sessions. http://www.ncomputing.com/kb/NComputing-L-series-Deployment-Checklist\_309.html

Once they have connected and received a session, you should register and update your device firmware (6.1 L-seriesUpdate Tab) as soon as possible.



# 2.0 NComputing vSpace

### 2.1 vSpace Information

Launch the vSpace Management Console by navigating from the Windows Start button to "NComputing vSpace," and then click on "NC-Console." Once the console launches, left-click on the "NComputing

vSpace" section of the left navigation tree to display information on the current vSpace build installed on your host. The vSpace information screen provides the following information:



Product Name Build Date	The product name of the current NComputing software installed on the host The publish date of the vSpace build currently installed
Version	The version number of the vSpace build currently installed
Copyright	vSpace Copyright information
Home Page	The official NComputing website URL
Technical Support	The official NComputing Technical Support URL
NC Console Version	The version number of the vSpace Console currently in use
Available (L300 / M300) Firmware	Indicates the current firmware version available for download from this host

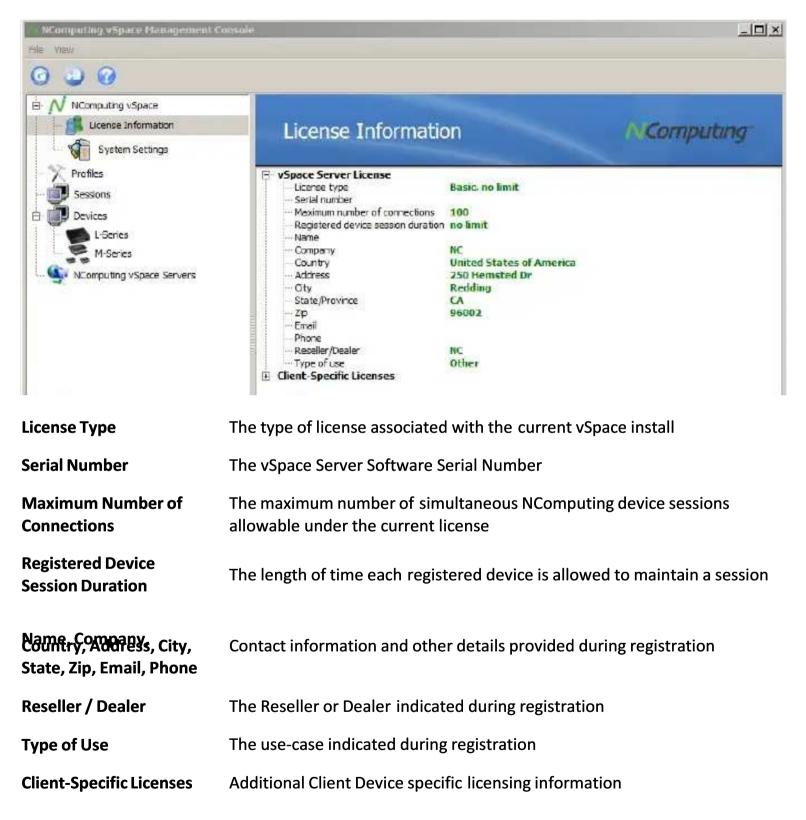
Left-click on the "+" sign next to the "NComputing vSpace" section of the left navigation tree to display the "License Information" and "System Settings" sections.

Page **4** of **34** 



# 2.2 License Information

Left-click on the "License Information" section of the left navigation tree to display licensing information for the vSpace software on your host. The License Information screen provides the following information:





# 2.3 System Settings - Common

Left-click on the "System Settings" section of the left navigation tree to display settings that affect the host, as well as devices that connect to it. The "Common" tab provides the following options and information:

E // NComputing Space	System Settings	NComputing
Profiles Sessions Devices Licenes M-Series Servers Remote vSpace Servers	Common       L-Series/M fibries       Performance Profiles         Computer name:       DL 380         System uptime:       0 days, 32 hours, 6 innuites, 0 second         Main Station AutoLogon         Enable AutoLogon         Laor name*r         Passwand*i         Disconnected sessem teamup timeout:         Send message publicy:         Full (Broadcast)         Start NE <console from="" ne<-prair:<="" td="">         Display last user name:         Rok user's permission to view session:</console>	3

Computer Name	The system name of the vSpace host
System Uptime	Displays the length of time the host has been running without interruption. Reboots and shut-downs will reset this counter.
Main Station Auto Logon	Enabling this feature with a valid user name and password will cause the host to automatically log in to Windows when it boots. Otherwise, a user will need to
Disconnected Session Cleanup Timeout	manually enter a user name and password each time the host starts up. This value determines how long the host will wait before closing a user session after its device disconnects. A larger value provides a longer "grace period" during which users can re-connect their device without losing progress.
Send Message from NC Tray Policy	This setting controls the NC Message feature, which allows devices to send messages to each other. <b>Full</b> allows users to send messages to all connected devices. <b>Point-to-point</b> restricts messages to a single target device. <b>Disabled</b> turns this functionality off entirely.
Start NC Console from NC Tray	This setting determines whether the NC Console can be opened from the NC Tray icon in the task bar.



Display Desktop Wallpapers	Enabling this feature will allow device users to select and display custom Desktop Backgrounds within their Windows sessions.
Display Last User Name	Enabling this feature will auto-populate the user name of the last user to log in when a new user attempts to log in to Windows.
Ask User's Permission to View Session	Enabling this feature will prompt the target user session for permission if someone attempts to view their session through the NC Console.

### 2.4 System Settings – L-Series/M-Series

The "L-Series/M-Series" tab provides access to settings that control video streaming, USB support, and remote console support among other features.

System Settings	N.Computing
Common       L.Serier, M.Serier       Performance Profiles         Video streaming support       ✓         JPG compression ratio (S-05):       ✓         LISD Support       ✓         USB support       ✓         Register future devices in the background:       ✓         Remote Console Support       ✓         Remote console personnels       ✓         Remote console personnels       ✓	×
	Common L.Series, M.Sories Performance Profiles Moleo Streaming Support Moleo Streaming Support JPG compression rate (S-95): JPG compression rate (S-95): USB support for L.Sonies, M.Series devices: Register future devices in the background: Register future devices in the background: Remote Console Support Enable remote console on this server:

The "L-series/M-series" tab provides the following options and information:

Video Streaming Support	Enables or disables vSpace's proprietary video compression and streaming technology.
JPG Compression Ratio	Increases or decreases the JPG compression ratio used by vSpace. Higher compression means more CPU load, but lower network bandwidth use. Lower compression means lower CPU load, while increasing the amount of data streamed across the network.
USB Support for L- Series/M-series Devices	Enables or disables USB support for L-series and M-series devices.
Page <b>7</b> of <b>34</b>	



Register Future Devices in the Background	Enabling this feature instructs the vSpace host to automatically register and activate L-series and M-series devices that connect in the future. This process will be completed silently in the background and requires no further interaction.
Enable Remote Console on this Server	Enabling this feature will allow other vSpace hosts to view this host's settings, as well as information on active sessions and USB port assignment.
Remote Console Password	Sets the desired password for Remote Console access by other hosts. Hosts attempting to connect remotely to this system will be prompted for this password.

## 2.5 System Settings – Performance Profiles

The "Performance Profiles" tab allows administrators to configure and assign separate performance configurations for varying network environments (such as Wireless, Low, and High Speed networks).

NComputing vSpace	System Settings	NComputing
Profiles Sessions Devices NComputing vSpace Servers	Common       Lisertes/Misertes       Performance Profiles         Assign Performance Profiles       Lisertes on a high-speed network           Misertes Devices       Lisertes on a high-speed network           Vispace Client       Lisertes on a high-speed network           Restore Defaults       Advanced	

Assign Performance Profiles	Allows the administrator to choose from a selection of custom performance profiles to be used by specific NComputing products.
Advanced	Provides additional advanced configuration options. (see section 2.6)



### <u>2.6 System Settings – Performance Profiles ADVANCED</u>

The Advanced menu allow administrators to create, edit, or delete individual performance profiles. The specific settings and their effects are detailed below.

dd,Remove Custom Profiles Oreate Profile Delete Profile ustomize Profiles	If desired, you can modify the performance set in the predefined profiles, or you can create ent new custom profiles.
elect performance profile: L-series on a h	ngh-speed network
Show Desktop Wallpaper	Default
Show window contents while dragging	Yes
Menu animations	Yes
Use Windows themes	Yes
Cursor shadow	Yes
Allow blinking cursor	No
Font smoothing	No
Maximum video frame rate (fps)	5
Video Quality (5-95%)	75
Video streaming support	Enable
Advanced Graphics Compression (MO3O)	Enable
Number of video frames to skip between u	pdates 0
Audio sample rate	22,500 Hz
Audio mono sound	No
Audio Solt sound	No
Maximum size (in bytes) of each network v	ideo update 0
Packet queue size for high latency network	s Fixed Size

Administrators can add or remove profiles using the "Create Profile" and "Delete Profile" buttons located to the top left of the menu. An existing profile can be selected using the drop down at the top of the "Customize Profiles" section of the menu. Defaults can be restored using the "Restore Defaults" button to the right of the menu.

Show Desktop Wallpaper	Enable the use of desktop wallpapers in user sessions. This can also be set to conform to existing user profile settings (default).
Show window contents while dragging	Enabling this setting shows full window contents when moving a window on the desktop. Disabling this setting will show only the window's outline while it is moving and can improve the overall performance of the desktop experience.
Menu animations	Enabling this setting enables graphical elements within the OS such as window animations. Disabling this option can improve desktop performance.
Use Windows themes	Setting this to "Yes" enables advanced Windows themes and graphical elements. Disabling this setting can improve desktop performance.



Cursor Shadow	Enables or disables the shadow seen beneath the mouse cursor. (Mouse shadows are not supported)
Allow blinking cursor	Enables or disables the blinking cursor effect.
Font smoothing	Enables or disables smoothing which can improve the appearance of fonts in some situations at the cost of increased resource usage.
Maximum video frame rate (fps)	Restricts streaming video frame rate to the value entered. Lower values will reduce network traffic when streaming videos to client sessions.
Video Quality	This setting affects the JPEG compression value found in the L-Series/M-Series tab (section 2.4). Lower percentage values will reduce the amount of network traffic being sent to client sessions at the cost of video quality.
Video streaming support	This setting enables or disables the advanced video streaming capabilities available to L300 and M300 devices.
Advanced Graphics Compression (MOJO)	Allows users to have more than one window open and streaming video at a time per session. Note that video performance may be better when limited to a single stream at a time.
Number of video frames to skip between updates	This value affects the rate at which the session image is updated. Larger values reduce network traffic but create a larger delay between updates.
Audio sample rate	Sets the audio sample rate to be used by sessions.
Audio mono sound	Sets the session to use mono sound.
Audio 8bit sound	Sets the session to use 8-bit sound.
Maximum size (in	
bytes) of each network video update	Restricts the size of network video updates. Best left at "0" (default value).
Packet queue size for high latency networks	Increasing this setting can provide a smoother streaming experience in high- latency networks.





# **3.0** Profiles

Left-click on the "Profiles" section of the left navigation tree to display information on device profiles that have been saved for future use. You can edit or delete these profiles by right-clicking on them in the profile list on the right side of the console.

V NComputing vSpace Hanagement ( File - Yew	ionsole.	
V NComputing vSpace     V NComputing vSpace     Ucense Information     System Settings	Profiles	1. Computing
Profiles     USB Assignment     Sessons     Terminals     Series     Remote vSpace Servers	Name techsign Test 1230 L300-5 Representation	7

Profiles can be "pulled" from existing devices and then "pushed" to entire groups of devices to simplify the process of configuring several devices at a time. See **6.11 Configuration Profiles** for more information on pushing and pulling profiles.

# NComputing"

# 4.0 USB Assignment

Left-click on the "USB Assignment" section of the left navigation tree to display information on USB controllers available to the host. From this interface, you can assign individual USB ports to specific user sessions. By default, most USB ports on the host and the peripherals attached to them are visible and available for use by any user (provided the peripherals themselves are multi-user aware).

// NComputing vSpace Management Console File - New		
20		
N NComputing vSpace     Profiles     USB Assignment	USB Assignment	MComputing
Intel(R) 82371A8/EB PCI to US8 Universal H     Fig. 4. USB Root Hub     Port 1: USB Composite Device     Print 2: No device connected     Find 2: No device PCI to USB Host Control	Available to all stations Available on host	
	Assigned to following devices:	
Remote vSpace Servers		

It is important to select USB ports that are not currently in use. Ports not in use are identified by the text "No device connected." If you select a USB port in use, you might accidently disable or restrict one of the ports servicing the host's keyboard, mouse or other USB peripheral. Once you have selected an open USB port, the following settings on the right side of the console will display:

Available to All Stations	This setting is enabled by default, and allows all devices to see a given USB port and access devices connected to it if those devices support multi-user environments. This setting must be disabled to enable the other two options.
Available on Host	Restricts the port to use by the host session only.
Assigned to Following Devices:	Allows administrators to decide which user session(s) have access to a given USB port.

# NComputing"

# **5.0 Sessions**

#### 5.1 Session Overview

When one or more devices connects to your vSpace host, the "Sessions" section of the left navigation tree will be populated with a list of active sessions. Left-click on the "Sessions" section to display an overview of active sessions on the right side of the console.

V NComputing vSpace Management Console Le View					
0 4 0					
Profiles	Se	ssio	ons	-	NComputing
🛱 🗰 Sessions	Session.	77	User Name	Device Name	Session Status
📕 Session 2	Session 2		test1		10.4.0.171.07/27/2011.03:51
Terminals     Remote uSpace Servers					

Right-click on any of the active sessions listed on the right side of the console to display the following four options.

**View Session** Select this option to allow you to view the desktop of the selected session.

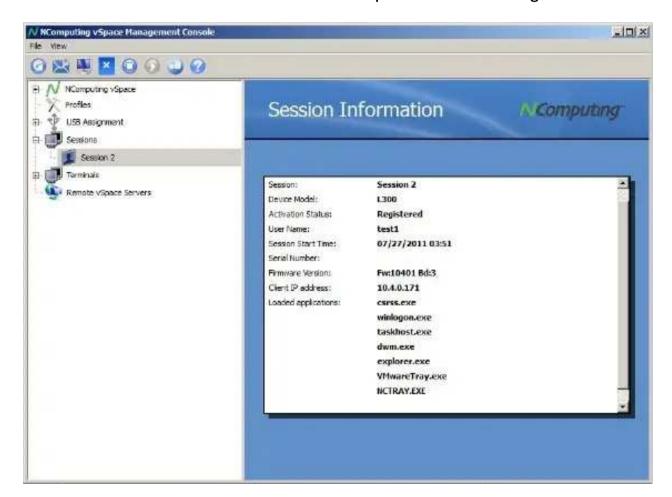
**Send Message** Select this option to broadcast a short text message to the selected session.

- DisconnectDisconnects the device from the current session, but leaves the session active for aSessionperiod of time for ease of reconnection.
- **Stop Session** Logs the user out of the current session.



## 5.2 Session Information

In addition to the session summary, you can expand the "Sessions" section of the left navigation tree to reveal information about individual sessions. Select these sessions to display additional information on the sessions themselves. The Session Information screen provides the following information:



Session	The session's identifying number
Device Model	The model of device connected to this session
Activation Status	The device's activation status, which is dependent on registration
User Name	The Windows User Name associated with this session
Session Start Time	The date and time that the session was created
Serial Number	The serial number of the device associated with this session
<b>Firmware Version</b>	The firmware version being used by the device associated with this session
<b>Client IP Address</b>	The IP address of the device connected to this session
Loaded Applications	The applications currently in use by this session



## 5.3 Session Controls

A number of controls that provide easy access to some common operations appear at the top of the console. These operations include the ability to remotely view a specific session or to send that session a message.

NComputing vSpace Man	nagement Console
File View	
( 🖸 🔛 🖳 💌 🔘	
N NComputing vSpace     VSB Assignment     Sessions     Session 2	Session Information NComputing
- 📜 Session 3	
$\bigcirc$	<b>Refresh</b> – Refreshes Device and Session data within the vSpace console.
$\ge$	Send Message – Sends a private message to the selected session.
	View* – Remotely displays the selected session, providing the same desktop view that the user is currently seeing.
×	<b>Disconnect</b> – Disconnects the device from its associated session.
$\bigcirc$	<b>Stop</b> – Stops the selected session, effectively logging the user out.
2	<b>Registration</b> –Opens the Registration dialog box.
	Help – Opens the Ncomputing Support page on an external web browser.

\*While using the "View" function on a session, administrators can right-click on the top bar of the view window to take control of that session.



# **6.0 Device Management**

### 6.1 L-series / M-series

The L-series and M-series sections of the console provide all of the tools and options needed to configure and maintain your devices, as well as important usage information (such as user name and

Heapting sheet Heapton firm							ALC N			-				
0.00														
N screpcing round	L-Sen	5	-		- 19	comput	ng:	M-Series				30	ompo	minși
V netter	Client denses	broodcost acend)	_		_		-	Child General Blacks	at word)					
and some	ABGOVER			1.00	ect before	e6. 0	(HISS	Al desces:				3980 34848		10090
Claim.	Dette law	V the have been montheday	Advantation -	Device Same	-	Betterber	NORM."	Denie form			Allermoney	-	-	-
Veren	CALADAR     C	Rast-Dens. Refer Dense Artonator Anto Contgrance Portla Bene Cartige store Faille Control Dense Faille Der Bene Dense a Der Bene Dense a (21.1864)(21.1864)(21.1864)(21.1864)(21	Elegisteri Rupinyez R	Anne Di Anne D	181 181 181 181 181 181 183 183 183 183	<ul> <li>(2011)</li> <li>(2011)</li></ul>	· · · · · · · · · · · · · · · · · · ·	MACRONICS	Estant Serios Rafalais Gerois Informant Agero Da Agerosant Har Tore Conference Harmon Under Gerber Parameter und Ameri Derror Parameter	CL14     CL14	Approved Registered Registered Registered Applications Ap	Scool started Scool started Scool started Scool scool scool Rever Col Rever	1 1.44 1 1.44	2046 0460 0460 2046 0460 2046 0460 0460

session number). The L and M-series devices share nearly identical configuration ontions.

**Right-click** on one or more devices displayed in the L-series or M-series Devices list to display some basic maintenance options. Standard left-click "box" selection, shift-click and ctrl-click methods allow for the selection of multiple devices at once.

- <u>Reset Device</u> Resets the selected device.
- <u>Refresh Device Information</u> Refreshes all information on the selected device within vSpace.
- <u>Apply Configuration Profile\*</u> Applies a stored Configuration Profile to the selected device(s).
- <u>Store Configuration Profile</u>\* Stores a profile of the selected device's settings for future use.
- <u>Update Device Firmware</u> Initiates the Firmware Update process on the selected device.
- <u>Set Device Password</u> Opens the Device Password menu for the selected device.

\* See **Section 6.11** for more information on storing and applying configuration profiles.

**Double-click** on any device displayed in the L-series Devices list to open the Device Settings menu. This menu contains the following sub menus, which are explained in detail in the pages that follow. **(cont. in section 6.3)** 

- Information Basic device information
- <u>Connections</u> Connection options
- <u>Server Groups</u> Details on preconfigured Server Groups and their contents
- Login Options for manual and automatic login
- <u>Network</u> Network settings and options
- <u>Password</u> Device password options
- <u>Update</u> Controls for updating device firmware



#### 6.2 Device Groups

When dealing with large numbers of devices spread throughout several logical or physical groups (for example, deployments across several office floors or classrooms), it can be advantageous to group these devices within the vSpace console itself. This can be accomplished by right-clicking on the "L-series" section inside the "Devices" group within the left navigation tree and selecting "Add Group," which opens the Device Group Management interface, as shown below:

Sroup name:				
Description:	Cassroom one			
-All devices -			Group devices	
S QARA			GARACK01	
S QAR/	ACK11		CARACK02	-
QARA QARA	ACK12 ACK13		QARACK03     GARACK04	
S QARA	AOK14	>>	CARACK05	
QARA QARA		• <<	QARACK06	-
10				

From this interface, devices can be added to a group which can be given a name befitting the nature of your deployment. Once created, groups can be selected from the "L-series" section of the console for easy configuration, as shown below:

) 🥥 🕜											
N NComputing vSpo Profiles USB Assignment Sessions		1999.00	Seri	CS	68.10.1/24	i range	-	NComp	utung	r	
E Terminals		Classroom one						Search Settings		Columns	
Group	Modify Group		- 1	User Name	Session	Serial Number	Activation Sta	te Device State	Version	B.id I	
Remote vSpace	Remove Group		C10 K09	test10 test9	Session 29 Session 22		Registered Registered	Session started Session started	1000	10407	
	Apply Configuration Pro Store Configuration Prof		608 607	test8 test7	Session 23 Session 20		Registered Registered	Session started Session started	1.11.11.11.11.1	10407 10407	
-	Reset Group Devices		KD6 KD5 KD4	test6 test5 test4	Session 15 Session 19 Session 17	Ē.	Registered Registered Registered	Session started Session started Session started	1.04.07	10407 10407 10407	
-	Update Device Firmware	QARAC	k03	test3 test2	Session 13 Session 3		Registered	Session started Session started	1.04.07	10407	
		and the second			and an and a set of the set		and the second second	Contraction of the second			

Page **17** of **34** 



# 6.3 Information Tab

The "Information" tab provides basic information on a selected device, including its network address and serial number. This tab also allows you to rename the device to facilitate identification.

Device name: te	
Device Information	
Serial Number:	
MAC Address:	
IP Address:	192.168.1.68
Firmware Version:	1.04.01 - Please, update firmware!
Schema ID:	3

Device Name	Displays the designated device name. This can be edited as desired.
Device ID	The Model ID of the selected device (L300's have a Device ID of 300)
Serial Number	The serial number of the selected device
MAC Address	The MAC address of the selected device
IP Address	The current IP address of the selected device
Firmware Version	Displays the currently loaded firmware version of the selected device. In this example, the device firmware is out of date, as indicated by the text "Please update firmware."
Schema ID	Miscellaneous build information (for NComputing internal use only)



## 6.4 Connections Tab

The "Connections" tab provides several host configuration options that determine how the device finds and then connects to available hosts. From here, you can set the device to automatically detect available servers, or instruct the device to connect to specific predetermined hosts or groups of hosts.

L-Series L300 Device Settin	95							
V Information / Conner	tions 😒	Server groups		Login		Network	(	Pa∮
At least one connection option	n must be sel	ected before set	tings c	an be sa	wed.			
Use Server groups tab to cha	nge server g	roups in drop dov	vn list	below.				
C Autoconnect to:	gnou	Jp1		<u>-</u>				
Manual connection	n options							
🔽 Auto-discor	vered connec	tions						
🔽 IP address	or hostname							
🗖 Server grou	ıp list							
					A.	Apply	×	Cancel

Autoconnect to	Configures the device to automatically connect to a predefined server location or server group.
Manual connection options	Configures the device so that the user can select a specific host, IP or Server Group each time the device boots.
Auto-discovered connections	Enable to display all available hosts on the device's subnet.
IP address or hostname	Enable to allow the user to type in a specific IP or host name.
Server group list	Enable to allow the user to select a server group to connect to.

# **NComputing**<sup>®</sup>

## 6.5 Server Groups Tab

The "Server Groups" tab allows administrators to combine several servers into a group, and then instruct the device to connect only to servers in that group. Exactly which servers are included in a given group and the order in which devices connect to them can be designated and altered within this menu. When the device is setup to autoconnect to a server group, it will connect to the first available server in the list (in the order set in the group). If the first server is not available, the device will then connect to the next server in the group, and so on. This is a key component for using the auto-failover feature of the L300.

Server list	Up	Server groups
<ul> <li>Discovered by terminal</li> <li>SALES-2</li> <li>SALES-1</li> <li>2K3TESTM</li> <li>2K8R2TEST</li> <li>ALEX2K3TEST</li> <li>TECHSUPPORTDIGI</li> </ul>	Down	⊞-group1 ⊕ group2
	>>	
	Add group	
VSPACE2	Add server	
	Remove	

>> Adds a detected server to a server group.

Add Group Creates a new server group.

Add Server Adds a new server to an existing server group.

**Remove** Removes the selected server or group.

**N**Computing<sup>™</sup>

### 6.6 Login Tab

The "Login" tab provides several configuration choices that determine how the device will behave once it connects to a given host system, including screen resolution and automatic login options. Note that the L-series and M-series Login configuration menus vary slightly as seen below.

creen resolution	1	Vertical refresh rate Skeep if idle for
640 x 480 x 16 bit color	-	60Hz Never
640 x 480 x 24 bit color 800 x 600 x 16 bit color		
800 x 500 x 16 bit color 800 x 500 x 24 bit color		Autologin settings
1024 x 768 x 16 bit color		To Darble and small black
1024 x 768 x 24 bit color		✓ Enable automatic login
1280 x 720 x 16 bit color		Domain:
1280 x 720 x 24 bit color		
1280 x 800 x 16 bit color		User: techsupport
1280 x 800 x 24 bit color 1280 x 1024 x 16 bit color	_	Password:
1280 x 1024 x 24 bit color		(assisted)
1360 x 768 x 16 bit color		Kicsk mode (no desktop)
1360 x 768 x 24 bit color		Deservery Commence
1366 x 768 x 16 bit color		Program: Browse
1366 x 768 x 24 bit color 1440 x 000 x 15 bit color	-	Folder:

	1/1	Server groups 🕅	Login 🥵 Network 🦠 Pa
Video Resoluti			Sleep if idle for
1366 x 768 x	24 bit color 😫		30 minutes 🗘
Automatic logi	n settings		
	gin 🖌 Station 1	Station 2	Station 3
and the second second	gn (•) statur i		• stator s
Domain:	2		
Uper*:	mtest4	mtest5	mtest5
Password*:		][	
Enable kiosk n	node 🗌 Station 1	Station 2	Station 3
Program:	Browse	Brow	vse
Folder:			
rouer.		<u></u>	



Screen Resolution	Sets the screen resolution and color depth to be used by the device once it connects to a host. Note that for the M-series, all three clients in an M-series kit share the same resolution and color depth settings.
Vertical Refresh	Sets the vertical refresh rate (in Hz) to be used by the device.
Rate	
Sleep If Idle For	Instructs the device how long to wait before turning off its video signal (thereby allowing the monitor to enter its built-in screen saver mode).
Enable Automatic Login	Instructs the device to use a specific user name and password when it connects to a host. When enabled, the credentials will be entered automatically, allowing for a swift login. Specify the user credentials in the fields below this option.
Kiosk Mode	Instructs the device to immediately launch a specific application on login, instead of providing the standard Windows desktop experience.
Program	The name of the executable or object to be launched on startup
Folder	The path to the file to be executed



### 6.7 Network Tab

The "Network" tab provides standard network configuration options, including a choice between static and dynamic IP acquisition.

-Network configuration - Interface;	Octoriza face		
Ethernet	Optimize for:	ř.	
C DHCP	Static IP address		
IP address:	192,168.1,129		
Subnet mask:	255.255.255.0		
Default gateway:	192.168.1.1		
Preffered DNS server;	192, 168, 1, 10		
Alternate DNS server:	192.168.1.15		

Interface Optimize for	Indicates the device's network interface. Indicates the type of network being used; LAN = Local Area Network.
DHCP	Instructs the device to acquire its network information from a DHCP server.
Static IP Address	Instructs the device to use specific network settings, which can be specified in the fields below this setting.



# 6.8 Password Tab

The "Password" tab provides the option of setting a password that will restrict future access to device configuration. Use this tab to enable and disable password protection.

L-Series L300 I	Vevice Settings					
Connections	Server groups	🕄 Login	Network	Nassword	d 🧭 Upda	te 🖌 🕨
No passwo	rd for Setup					
and the second						
C Require pa	ssword to enter Set	tup (password canr	iot de recove	red)		
-New passwo	'd		Τ			
Type passwo	ırd:					
Retype pass	word:					
<u>.</u>			-1.:			
				J.		Cancel

No Password for Setup	Sets the device to be accessible for configuration by any user.
Require Password to Enter Setup	Sets the device to require a password before device settings can be altered. If a password does not currently exist, it can be entered in the fields directly beneath this option.

# **NCOMPUTING**

## 6.9 Update Tab

The "Update" tab is used to check for and install (if available) firmware updates for the device. This tab allows you to select from several different update methods, and can be set to draw firmware updates from inside your network, or from an external FTP location.

and the second	🥱 Server groups 🕅 Login 🍛 Network 🦠 Password 🎤 Update 🖣
Automatic u	ipdate
C Automa	atically download and install the latest firmware every time the device powers on
Update met	thod
	and update from LAN
CONTRACTOR OF	and update from FTP server
C 19559/6761	
-FTP server	
URL:	ftp://127.0.0.1
User name:	÷ []
	vord:
Type passw	
Type passw Retype pas	sword:

Automatic Update	Enable this option to instruct the device to automatically check for newer firmware that is available on the servers it can see during startup. If found, it will then download and install this firmware automatically.
Search and Update from LAN	This option instructs the device to search for updated firmware within the local area network it resides in.
Search and Update from FTP Server	This option instructs the device to search for updated firmware at a specific FTP location. Enter the full path of a specific firmware file to force the device to use that specific file (which allows for downgrading if needed). Enter the path of a folder that contains multiple firmware versions and a firmware index file to instruct the device to use the most recent firmware version available, according to the index file.
	For more information on firmware updates via FTP, visit <a href="http://www.ncomputing.com/kb/Using-FTP-to-update-L300-Firmware_308.html">http://www.ncomputing.com/kb/Using-FTP-to-update-L300-Firmware_308.html</a>
FTP Server Credentials	These fields allow you to enter the URL, user name and password for the FTP server you wish to use (if required).

#### 6.10 Search Settings and Columns

The "Search Settings and Columns" features in the upper-right side of the "L and M-series" sections provide additional tools for locating, sorting and displaying device information.

NComputing vSpace	L-Seri	es				Comp	uting
VSB Assignment Sessions	L-Series devices All devices:	in the LAN			( Search S	ettings	Columns
Terminals	Device Name	User Name	Session	Serial Number	Activation State	Device State	indexes and the second
L-Series Device Search Settings     Broadcast search     Multicast search (requires multicast     Search by range of IP addresses (o     -IP Address Konte	routing support) (rect scanning)	×	<u>রবোর রোরবির</u>	User Name Session Serial Number Activation State Device State Version Build Number Scheme ID Device ID Boot Server IP Address IP Address	evice List Column		X 1. 5. 9ection 5. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Frist IP add eau 12220-0-1 From To	uest 2 est	dress	বাবহা	IP Type Stabic IP Gabeway IP MAC Password			1. 1. 1.

The L/M-series Device Search Settings dialog box provides administrators with the ability to locate devices anywhere on the network (provided that the connections in question are allowed by the network's routing rules), as well as the ability to search specific IP ranges, while ignoring others. The dialog box contains the following options:

Broadcast Search	Searches for devices on the same subnet as the host using UDP broadcast.
Multicast Search	Uses the network Multicast functionality of certain high-end routers and switches to more efficiently discover devices. (Must be supported by network hardware.)
Search by Range of IP Addresses	Searches for devices within a specified IP range.
IP Address Range	Provides the necessary fields to specify what range of IP addresses you wish to search within (only applies to "Search by Range of IP Addresses" setting).

The Select L/M-series Device List Columns dialog box provides an extensive list of device details that can be toggled on or off as desired to create a custom display within the L/M-series device list. These choices affect which columns are displayed in the L/M-series Devices field to the right of the vSpace management console.

Page **26** of **34** 

# 6.11 Configuration Profiles

As of vSpace version **L-6.5.1.**, the NComputing vSpace Console includes the ability to save L-series device settings and apply those settings to other L-series devices across the network. While administrators retain the option to fine-tune devices on an individual basis, the Profile Management feature adds the ability to design and then deploy pre-selected configuration profiles to groups of devices in one step.

### 6.12 Creating Profiles

Profiles can be created by right-clicking on a device in the L/M-series Devices list and selecting the "Store Configuration Profile" option from the pop-up menu that displays, as shown below:

000								
<ul> <li>N NComputing vSpace</li> <li>Profiles</li> <li>USB Assignment</li> </ul>	L-Seri	es				NComp	uting	T
Sessions Terminals	L-Series devices	in the LAN						
L-Series	All devices:				Sear	ch Sattings	Colum	rs
Servers Remote vSpace Servers	Device Name	User Name	Session	Senal Number	Activation State	Device State	Version	Bult
	QARACK99	test99	Session 21		CONTRACTOR OF CONTRACTOR	and state state states	1.04.04	104
	QARACK98	test98	Session 19	9	Reset Device		1,04,04	104
	QARACK97	test97	Session 17	2	Refresh Device	Information	1.04.04	104
	QARACK96	test96	Session 15	1. S.	Carly Carlinson	ation Profile	1.04.04	104
	QARACK95	test95	Session 13	5.01 7		and the second second	1.04.04	104
	QARACK99	test94	Session 11	ι .	Store Configur	ation Profile	1.04.04	104
	QARACK93	test93	Session 9		Update Device	Thomas	1.04.04	104
	QARACK92	test92	Session 7			120000000000000000000000000000000000000	1.04.09	104
	QARACK91	test91	Session 4		Set Device Pas	21492 (210) A.C.	1.D4.04	104
	QARACK90	test90	Session 2		Registered	Session started	1000000	104
	QARACK89	test89	Session 20	Den e	Registered	Session started		104
	QARACK88				Registered	Power On	1.04.04	104
	GARACK87	test86	Session 14		Registered Registered	Power On Session started	1.04.04	104
	GARACK85	test85	Session 12		Registered	Session started	1	104
	GARACK84	test84	Session II		Registered	Session started		104
	CARACK83	test83	Session 8		Registered	Session started		104
	GARACK82	test82	Session 6		Registered	Session started		104
	QARACK81	testB1	Session 3		Registered	Session started		104
	GARACEBU	000000			Registered	Power Off	1.01.09	104
	GARACI79				Registered	Power Off	1.04.04	104
	QARACK78				Registered	Power Off	1.04.04	104
	CORACITZ				Registered	Rower Off	1.04.04	174

After choosing to store the selected profile, a confirmation will appear. Select "Yes" from the confirmation dialog box to store the profile in the "Profiles" section of the vSpace Management Console. The Management Console can store multiple profiles, and you can edit or remove them at any time.

# **NCOMPUTING**

# 6.13 Editing Profiles

Once a profile is created, administrators can edit the profile in the same way they would apply changes to the settings of an individual device. To do this, select "Profiles" from the left navigation tree within the Management Console, and then right-click on a profile, as shown below:

000		
NComputing vSpace     Profiles     USB Assignment	Profiles	NComputing
5- D Sessions 3- D Terminals 1-Series Semate vSpace Servers	Name CARACINA Edit Profile Delete Profile	

Once you have selected a profile to edit, you will be presented with a multi-tabbed configuration menu that closely resembles the device configuration menu. This menu allows you to rename the selected

profile, as well as alter Connection, Server Group, Login, Password and Firmware Update settings, as shown below:

NERroputing vSpace Management () 716 - View	shede
0 2 0	
N NComputing vSpace     N Profiles     USB Assignment	Profiles <i>NComputing</i>
E Sessions	Kame
E-Saries	QARACI99 WL-Series L300 Device Settings X
Remote vSpace Servers	V Information / Connections Server groups til Login Possword L

# **NCOMPUTING**<sup>®</sup>

# 6.14 Applying Profiles

To apply a saved profile to other devices, select one or more L/M-series devices within the L or M-series Device list and then right-click on any of the selected devices. From the pop-up menu that displays, select "Apply Configuration Profile," as shown below:

Device Name       User Name       Session       Sanal Number       Activation State       Device State       Yersion         Q4RACK99       test95       Session 11       Registered       Session Started 1.04.04         Q4RACK97       test95       Session 17       Reset Device       #d 1.04.04         Q4RACK97       test95       Session 17       Reset Device       #d 1.04.04         Q4RACK95       test95       Session 12       Activation Profile       #d 1.04.04         Q4RACK95       test95       Session 12       Activation Profile       #d 1.04.04         Q4RACK95       test93       Session 14       Activation Profile       #d 1.04.04         Q4RACK91       test93       Session 2       Set Device Password       #d 1.04.04         Q4RACK91       test93       Session 2       Set Device Password       #d 1.04.04         Q4RACK91       test93       Session 2       Registered       Power Dn<1.04.04         Q4RACK91       test93       Session 12       Registered       Power Dn<1.04.04         Q4RACK91       test93       Session 12       Registered       Session started 1.04.04         Q4RACK91       test93       Session 12       Registered       Session started 1.04.04 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>-</th> <th>20</th>								-	20
Terminals       Listeries       Sector Settings       Column Settings	g.	utang	Comp	-	-		es	L-Seri	Profiles
LSeries       All devices:       Search Settings       Column Series         Remote YSpace Servers       Device Name       User Name       Session       Series Number       Activation State       Device Name       Version         Q4RACKS9       test39       Session 19       Reset Device       Ed. J. 04.00         Q4RACKS9       test39       Session 19       Reset Device       Ed. J. 04.00         Q4RACKS9       test39       Session 12       Reset Device       Ed. J. 04.00         Q4RACKS9       test39       Session 12       Reset Device       Ed. J. 04.00         Q4RACK90       test39       Session 12       Reset Device       Ed. J. 04.00         Q4RACK90       test39       Session 11       Apply Configuration Profile       Profile         Q4RACK91       test39       Session 7       Update Device Person 4       Ed. J. 04.00         Q4RACK91       test39       Session 2       Reset Device 7       Ed. J. 04.00         Q4RACK92       test39       Session 7       Update Device Person 4       Ed. J. 04.00         Q4RACK92       test39       Session 2       Reset Device 7       Id. 04.00         Q4RACK92       test39       Session 2       Rest 2       Revistanted 1.04.00 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>In the LAN</th> <th>1-Series devices</th> <th></th>							In the LAN	1-Series devices	
ControlDesk reliefDesk reliefPresent SectorPresent SectorPresent SectorQARACK99test99Seston 12RegisteredSeston Storted J. 04.04QARACK98test97Seston 17Reset Device#d J. 04.04QARACK96test95Seston 15Refrash Device Information#d J. 04.04QARACK96test95Seston 13Aotly Configuration Profile#d J. 04.04QARACK96test95Seston 11Store Configuration Profile#d J. 04.04QARACK91test93Seston 13Store Configuration Profile#d J. 04.04QARACK92test93Seston 14Store Configuration Profile#d J. 04.04QARACK92test93Seston 2Set Device Presented#d J. 04.04QARACK93test93Seston 2RegisteredSeston Stored J. 04.04QARACK93test93Seston 2RegisteredSeston Stored J. 04.04QARACK93test93Seston 2RegisteredPower On J. 04.04QARACK94test65Seston 14RegisteredSecon storted J. 04.04QARACK65test65Seston 14RegisteredSecon storted J. 04.04QARACK65test65Seston 14RegisteredSecon storted J. 04.04QARACK65test65Seston 14RegisteredSecon storted J. 04.04QARACK65test65Seston 10RegisteredSecon storted J. 04.04QARACK65test65Seston 10RegisteredSecon storted J. 04.04QARACK65<	nts	Colum	Settings	Search				All devices:	
OARACX98test38Sestion 19Reset DeviceSJ. J. 4.04QARACX97test97Sestion 17Refeat Deviceed. J. 04.04QARACX96test95Sestion 15Refeat Device Informationed. J. 04.04QARACX96test94Sestion 15Refeat Device Informationed. J. 04.04QARACX96test94Sestion 11Apply Configuration ProfileProfileQARACX91test94Sestion 9State Configuration Profileed. J. 04.04QARACX92test93Sestion 9State Configuration Profileed. J. 04.04QARACX92test93Sestion 9State Configuration Profileed. J. 04.04QARACX93test93Sestion 2Set Device Passworded. J. 04.04QARACX94test93Sestion 20RegisteredSestion started 1.04.04QARACX83RegisteredPower DnJ. 04.04QARACX84test39Sestion 12RegisteredSeston started 1.04.04QARACX85test35Sestion 12RegisteredSeston started 1.04.04QARACX85test35Sestion 12RegisteredSeston started 1.04.04QARACX85test33Sestion 10RegisteredSeston started 1.04.04QARACX85test33Sestion 3RegisteredSeston started 1.04.04QARACX85test33Sestion 3RegisteredSeston started 1.04.04QARACX85test33Sestion 3RegisteredSeston started 1.04.04QARACX85test33Sestion 3	Bul	Yersion	Device State	Activation State	Serial Number	Session	User Name	Device Name	🗣 Remote YSpace Servers
QAPACK97test97Session 17Reset Deviceed 1.04.04QAPACK95test96Session 15Rafrash Device Informationed 1.04.04QAPACK95test95Session 12Aoch/ Configuration Profileed 1.04.04QAPACK95test93Session 13Aoch/ Configuration Profileed 1.04.04QAPACK94test93Session 9Store Configuration Profileed 1.04.04QAPACK91test93Session 7Ubdate Device Personnelled 1.04.04QAPACK91test91Session 7Ubdate Device Personnelled 1.04.04QAPACK91test91Session 2Set Device Personnelled 1.04.04QAPACK92test99Session 20RegisteredSession started 1.04.04QAPACK93test95Session 20RegisteredSession started 1.04.04QAPACK84test89Session 12RegisteredSession started 1.04.04QAPACK85test85Session 12RegisteredSession started 1.04.04QAPACK84test85Session 12RegisteredSession started 1.04.04QAPACK84test85Session 12RegisteredSession started 1.04.04QAPACK84test83Session 8RegisteredSession started 1.04.04QAPACK84test83Session 12RegisteredSession started 1.04.04QAPACK84test83Session 8RegisteredSession started 1.04.04QAPACK82test83Session 8RegisteredSession started 1.04.04QAPACK82<	304	1,04,04	Session started	Registered		Session 21	test99	QARACK99	
QAFACK97test97Session 17Refrash Device Informationed 1.04.04QARACK96test96Session 13Aoply Configuration Profileed 1.04.04QARACK96test94Session 11Aoply Configuration Profileed 1.04.04QARACK93test93Session 9Store Configuration Profileed 1.04.04QARACK93test93Session 9Store Configuration Profileed 1.04.04QARACK93test93Session 9Store Configuration Profileed 1.04.04QARACK93test91Session 4Update Device Planwareed 1.04.04QARACK93test91Session 4Update Device Planwareed 1.04.04QARACK93test93Session 2Set Device Passworded 1.04.04QARACK94test99Session 20RegisteredSession started 1.04.04QARACK95test99Session 20RegisteredSession started 1.04.04QARACK96test99Session 12RegisteredSession started 1.04.04QARACK86test95Session 12RegisteredSession started 1.04.04QARACK86test95Session 12RegisteredSession started 1.04.04QARACK86test93Session 8RegisteredSession started 1.04.04QARACK86test95Session 10RegisteredSession started 1.04.04QARACK86test95Session 10RegisteredSession started 1.04.04QARACK86test95Session 10RegisteredSession started 1.04.04 <t< td=""><td></td><td></td><td></td><td>Darah Davies</td><td></td><td>Session 19</td><td>test98</td><td>QARAOK98</td><td rowspan="3"></td></t<>				Darah Davies		Session 19	test98	QARAOK98	
QARACK95test95Sesion 12QARACK94tast94Sesion 11Apply Configuration Profile + Profile IProfile IQARACK93test93Sesion 9Stare Configuration Profile + Profile Ied 1.04.04QARACK92test92Sesion 7Update Device Firmware + ed 1.04.04ed 1.04.04QARACK91test91Sesion 4Update Device Firmware + ed 1.04.04ed 1.04.04QARACK90test90Sesion 2Set Device Password + ed 1.04.04ed 1.04.04QARACK91test91Sesion 20RegisteredSesion started 1.04.04QARACK92test95Sesion 20RegisteredSesion started 1.04.04QARACK84test95Sesion 12RegisteredSesion started 1.04.04QARACK85test85Sesion 12RegisteredSesion started 1.04.04QARACK85test85Sesion 12RegisteredSesion started 1.04.04QARACK85test85Sesion 12RegisteredSesion started 1.04.04QARACK85test85Sesion 10RegisteredSesion started 1.04.04QARACK85test83Sesion 3RegisteredSesion started 1.04.04QARACK82test83Sesion 3RegisteredSesion started 1.04.04QARACK82test83Sesion 3RegisteredSesion started 1.04.04QARACK82test83Sesion 3RegisteredSesion started 1.04.04QARACK82test83Sesion 3RegisteredSesion started 1.04.04QARACK82test83				3 11 33	Contraction and Contraction of Contr	Session 17			
QARACKINtast34Session 11Apply Configuration Profile *ProfileQARACKINtest93Session 9Sture Configuration Profile *ed 1.14.04QARACKINtest93Session 9Sture Configuration Profile *ed 1.14.04QARACKINtest91Session 4Ubdate Device Prover Prover *ed 1.04.04QARACKINtest91Session 2Set Device Passworded 1.04.04QARACKINtest95Session 20RegisteredSession started 1.04.04QARACKINtest85Session 20RegisteredSession started 1.04.04QARACKINtest85Session 12RegisteredSession started 1.04.04QARACKINtest85Session 14RegisteredSession started 1.04.04QARACKINtest85Session 12RegisteredSession started 1.04.04QARACKINtest85Session 12RegisteredSession started 1.04.04QARACKINtest83Session 12RegisteredSession started 1.04.04QARACKINtest83Session 3RegisteredSession started 1.04.04QARACKIN </td <td></td> <td></td> <td></td> <td>Refresh Device Info</td> <td></td> <td></td> <td></td> <td></td>				Refresh Device Info					
OHAVACISHSession 11QARACK92test93Session 9QARACK92test92Session 9QARACK92test92Session 7QARACK91test91Session 4QARACK92test91Session 4QARACK92test90Session 2QARACK93test90Session 20QARACK94test99Session 20QARACK95test99Session 20QARACK86QARACK86Power DnQARACK86test86Sestion 14QARACK86test85Session 12QARACK86test85Session 12QARACK86test83Session 3QARACK86test83Session 3QARACK86test83Session 3QARACK86test83Session 3QARACK86test81Session 3QARACK87test83Session 3QARACK88test83Session 3QARACK86test83Session 3QARACK87test83Session 3QARACK88test81Session 3QARACK81test81Session 3QARACK82test83Session 3QARACK83test81Session 3QARACK84test81Session 3QARACK85test81Session 3QARACK86test81Session 3QARACK87test83Session 4QARACK88test83Session 4QARACK84test81Session 3QARACK85test81Session 4QARACK86test81 <t< td=""><td></td><td>and the second second</td><td></td><td>Apply Coolid value</td><td></td><td>Contraction of the local distance of the loc</td><td>And the second second</td><td></td><td></td></t<>		and the second second		Apply Coolid value		Contraction of the local distance of the loc	And the second second		
OARACK92test92Sestion 7Update Device Removancead 1,04.04OARACK91test91Sestion 4Sestion 4Set Device Researchad 1,04.04OARACK90tast90Sestion 2Set Device Researchad 1,04.04OARACK69test98Sestion 2DRegisteredSestion started 1,04.04OARACK69test98Sestion 2DRegisteredSestion started 1,04.04OARACK67RegisteredSestion started 1,04.04OARACK67RegisteredSestion started 1,04.04OARACK65test85Sestion 14RegisteredOARACK65test85Sestion 12RegisteredOARACK65test83Sestion 12RegisteredOARACK60test83Sestion 8RegisteredOARACK61test83Sestion 3RegisteredOARACK61test83Sestion 3RegisteredOARACK61test83Sestion 3RegisteredOARACK61test83Sestion 3RegisteredOARACK61test81Sestion 3RegisteredOARACK61test81Sestion 3RegisteredOARACK61test81Sestion 3RegisteredOARACK61test81Sestion 3RegisteredOARACK62test81Sestion 3RegisteredOARACK63test81Sestion 4RegisteredOARACK64test81Sestion 3RegisteredOARACK65test81Sestion 3RegisteredOARACK65test81Sestion 3OARA	04		and the second se	Contractory of the second states of			and the second		
QARACK91test91Sestion 4Ubdate Device Researched 1.04.04QARACK90tast90Saston 2Set Device Passwordad 1.04.04QARACK80test89Sestion 2DRegisteredSestion started 1.04.04QARACK80QARACK87RegisteredPower Dn1.04.04QARACK86test85Sestion 14RegisteredPower Dn1.04.04QARACK86test85Sestion 14RegisteredSestion started 1.04.04QARACK86test85Sestion 12RegisteredSestion started 1.04.04QARACK86test85Sestion 12RegisteredSestion started 1.04.04QARACK86test83Sestion 10RegisteredSestion started 1.04.04QARACK80test83Sestion 3RegisteredSestion started 1.04.04QARACK81test83Sestion 3RegisteredSestion started 1.04.04QARACK81test83Sestion 3RegisteredSestion started 1.04.04QARACK81test83Sestion 3RegisteredSestion started 1.04.04QARACK81test83Sestion 3RegisteredSestion started 1.04.04QARACK81test81Sestion 3RegisteredSestion started 1.04.04QARACK81test81Sestion 3RegisteredSestion started 1.04.04QARACK81test81Sestion 3RegisteredSestion started 1.04.04QARACK81test81Sestion 3RegisteredSestion started 1.04.04QARACK80test81Sestion 3Register	I COMPANY OF		10000000000	Store Configuration					
Operation     Description       OARACKS1     testS1     Session 4       OARACKS0     tast90     Session 2       OARACKS0     testS1     Session 20       OARACKS0     testS5     Session 14       OARACKS0     testS5     Session 12       OARACKS0     testS3     Session 12       OARACKS0     testS3     Session 3       OARACKS2     testS3     Session 3       OARACKS3     testS1     Session 3       OARACKS3     testS1     Session 3       OARACKS3     testS3     Session 3       OARACKS3     testS3     Session 3       OARACKS3     testS1     Session 3       OARACKS3     testS1     Session 3       OARACKS3     testS3     Session 3       OARACKS3     testS1     Session 3       OARACKS3     testS1				Undate Disvice Firm		and the second second second			
QARACK69     test89     Session 20     Registered     Session started     1.04.04       QARACK68     Registered     Power Dn     1.04.04       QARACK67     Registered     Power Dn     1.04.04       QARACK67     Registered     Power Dn     1.04.04       QARACK65     test85     Sestion 14     Registered     Session started     1.04.04       QARACK65     test85     Sestion 12     Registered     Session started     1.04.04       QARACK64     tast84     Sestion 12     Registered     Session started     1.04.04       QARACK60     test83     Session 8     Registered     Session started     1.04.04       QARACK61     test83     Session 8     Registered     Session started     1.04.04       QARACK61     test81     Session 3     Registered     Session started     1.04.04       QARACK62     <	100 C 100		V.	110000000000000000000000000000000000000					
QARACK88       Pagistared       Power Dn       1.04.04         QARACK87       Registered       Power Dn       3.04.04         QARACK85       test85       Sestion 14       Registered       Session started       3.04.04         QARACK85       test85       Sestion 12       Registered       Session started       3.04.04         QARACK84       test85       Session 12       Registered       Session started       3.04.04         QARACK84       test81       Session 10       Registered       Session started       3.04.04         QARACK80       test83       Session 8       Registered       Session started       3.04.04         QARACK81       test83       Session 3       Registered       Session started       3.04.04         QARACK81       test81       Session 3       Registered       Session started       3.04.04         QARACK81       test81       Session 3       Registered       Session started       1.04.04         QARACK81       test81       Session 3       Registered       Power Off       1.04.04         QARACK82       test81       Session 3       Registered       Power Off       1.04.04         QARACK83       test81       Session 3       Registered			C2164/1				1000		
QARACK87       Registered       Power Dn       3.04.04         QARACK86       test85       Sestion 14       Registered       Session started 1.04.04         QARACK85       test85       Session 12       Registered       Session started 1.04.04         QARACK84       test85       Session 12       Registered       Session started 1.04.04         QARACK84       test84       Session 10       Registered       Session started 1.04.04         QARACK80       test83       Session 8       Registered       Session started 1.04.04         QARACK82       test83       Session 8       Registered       Session started 1.04.04         QARACK82       test83       Session 3       Registered       Session started 1.04.04         QARACK81       test81       Session 3       Registered       Session started 1.04.04         QARACK81       test81       Session 3       Registered       Session started 1.04.04         QARACK80       Fegistered       Power Off       1.04.04         QARACK93       Fegistered       Power Off       1.04.04         QARACK93       Fegistered       Power Off       1.04.04         QARACK93       Fegistered       Power Off       1.04.04         QARACK98       Fegister	1000					dession 20	testille		
QARACK86       test85       Sestion 14       Registered       Session started 1.04.04         QARACK85       test85       Session 12       Registered       Session started 1.04.04         QARACK84       test84       Session 10       Registered       Session started 1.04.04         QARACK84       test84       Session 10       Registered       Session started 1.04.04         QARACK80       test83       Session 8       Registered       Session started 1.04.04         QARACK82       test83       Session 8       Registered       Session started 1.04.04         QARACK82       test83       Session 3       Registered       Session started 1.04.04         QARACK81       test81       Session 3       Registered       Session started 1.04.04         QARACK80       Fegistered       Session started 1.04.04       Fegistered       Power Off       1.04.04         QARACK80       Fegistered       Power Off       1.04.04       Fegistered       Power Off       1.04.04         QARACK78       Fegistered       Power Off       1.04.04       Fegistered       Power Off       1.04.04									
QARACK85       test85       Session 12       Registered       Session started       1.04.04         QARACK84       tast84       Session 10       Registered       Session started       1.04.04         QARACK83       test83       Session 8       Registered       Session started       1.04.04         QARACK82       test83       Session 8       Registered       Session started       1.04.04         QARACK82       test83       Session 8       Registered       Session started       1.04.04         QARACK82       test81       Session 3       Registered       Session started       1.04.04         QARACK81       test81       Session 3       Registered       Session started       1.04.04         QARACK80       Registered       Power Off       1.04.04         QARACK80       Registered       Power Off       1.04.04         QARACK79       Registered       Power Off       1.04.04         QARACK78       Registered       Power Off       1.04.04	1000					Contrary 14	PRAFEC.		
QARACK84     test84     Seston 10     Registered     Session started 1,04.04       QARACK83     test83     Session 8     Registered     Session started 1,04.04       QARACK82     test83     Session 8     Registered     Session started 1,04.04       QARACK82     test82     Session 3     Registered     Session started 1,04.04       QARACK81     test81     Session 3     Registered     Session started 1,04.04       QARACK80     test81     Session 3     Registered     Session started 1,04.04       QARACK80     registered     Power Off     1,04.04       QARACK79     Registered     Power Off     1,04.04       QARACK78     Fegistered     Power Off     1,04.04	1.000								
OARACK80     test83     Session 8     Registered     Session started 1,04.04       OARACK82     test82     Session 6     Registered     Session started 1,04.04       OARACK82     test81     Session 3     Registered     Session started 1,04.04       OARACK81     test81     Session 3     Registered     Session started 1,04.04       OARACK80     Fegistered     Power Off     1,04.04       OARACK79     Registered     Power Off     1,04.04       OARACK78     Fegistered     Power Off     1,04.04	1000						and the second second		
OAFACK82     testsi2     Session 5     Registered     Session started     1,04,04       OAFACK81     test61     Session 3     Registered     Session started     1,04,04       OAFACK80     Registered     Fourier Off     1,04,04       OAFACK78     Registered     Fourier Off     1,04,04	1000							A CONTRACTOR OF A CONTRACTOR O	
OARACK81         Lest81         Session 3         Registered         Session started 1.04.04           Q4RACK80         Registered         Power Off         1.04.04           Q4RACK80         Registered         Power Off         1.04.04           Q4RACK80         Registered         Power Off         1.04.04           Q4RACK78         Registered         Power Off         1.04.04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
QARACK80 Registered Power Off 1.04.04 QARACK79 Registered Power Off 1.04.04 QARACK78 Registered Power Off 1.04.04				Contraction of the second second				The second second second	
Q4R4QK79 Registered Power Off 1.04.04 Q4R4CK78 Registered Power Off 1.04.04		1.04.04	A CONTRACT OF A	AND ADDRESS OF			Contraction of the	A CONTRACTOR OF A CONTRACTOR O	
		1.04.04						The second se	
	1844	1-84.09	Fower Off	Registered				QARACK78	
ADD/077 Renktered Briver NY 1.54 04	184	1.54.04	Priver Off	Renktured					

After confirming the action, the Management Console will begin updating the selected devices. This process may take a few moments, depending on the number of devices affected by the update. Once the process is complete, the affected device(s) will reboot automatically.

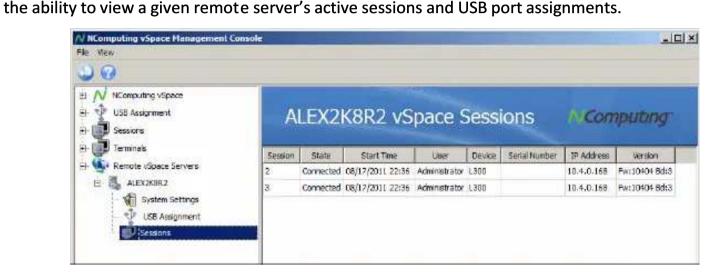
Keep in mind that L and M-series device profiles are not cross compatible due in part to the fact that Mseries stores information for three separate devices/users per kit as compared to the L-series' single device/user. For this reason Profiles must be created for and applied to M and L-series devices separately.

**NOTE:** If a device has a password applied to it, you will be prompted to enter the password when attempting to apply a profile to that device.

# **N**Computing<sup>\*\*</sup>

# 7.0 Remote vSpace Servers

The "Remote vSpace Servers" section of the console allows administrators with multiple host systems on a given network to view and manage multiple hosts from one location. Additional features include



When one or more vSpace hosts have been configured for Remote Console support, they appear under the "Remote vSpace Servers" section of the vSpace console's left navigation tree. Select this section of the navigation tree to display available hosts to the right of the console; click the "+" sign to expand the navigation tree and display the individual servers as sub groups. Click on the "+" sign next to each server to display all available remote settings and configuration menus.

## 7.1 Enabling Remote Console Support

To allow a given host to be accessed remotely by other hosts, enable the Remote Console Support feature in the System Settings menu under the "L-series" tab (**2.3 System Settings**). To do this, select the "Enable remote console on this server" checkbox and enter a password, as shown in the image below:

Remote Console Support		
Enable remote console on this se	rver: 🔽	
Remote console password:		



## 7.2 Remote Console Features

While many of the host management features can be accessed remotely, there are some differences between what can be accessed remotely (from a different vSpace host on the same or different subnet) and what can be accessed locally (from the Management Console running on the host to which devices are connected). Below is a feature matrix demonstrating some of these differences.

12		Available Locally	Available Remotely (same subnet)	Available Remotely (cross subnet)
Custom Cattings	View	~	~	2 X
System Settings	Edit	~	~	
	View	~	~	
USB Assignment	Edit	$\checkmark$		
	View	~	~	54
<b>Connected Sessions</b>	Edit	~	б Ю	
Dovice Settings	View	~	~	$\checkmark$
Device Settings	Edit	~		~

While keeping the limitations listed above in mind, features available through the remote console function in much the same way they would locally. Below is a brief overview of each subsection available for each remote server.

Server and Licensing Information	Click on the server name within the left navigation tree to display a mix of vSpace and Licensing information for that server (as described in <b>sections 2.1 and 2.2</b> of this guide).
System Settings	Provides a selection of host configuration options (as described in <b>section 2.3</b> of this guide).
USB Assignment	Provides details on USB devices connected to the host and their current device access settings (as described in <b>section 4.0</b> of this guide).
Sessions	Displays a list of currently active sessions on the selected host. Unlike the local Sessions list, you cannot directly interact with sessions viewed through the "Remote Servers" section of the vSpace console.

# 8.0 Common Tasks

This section provides some examples of frequently-encountered administrative tasks that utilize many of the features outlined in the previous sections.

### 8.1 Helpdesk Tasks - Remote Viewing and Controlling a Device Session

For this example, we'll simulate remotely viewing and then controlling an active vSpace session. These actions will demonstrate the following vSpace console features:

- Locating sessions by windows login credentials
- Viewing a session remotely
- Controlling a session remotely

#### The Scenario:

A device user is having trouble and has called their office helpdesk service to assist them. The nature of the issue suggests that the easiest solution may be to **have a technician take over their session** 

**remotely and perform a few troubleshooting tasks**. In this scenario, the user doesn't know what their device name is but provides the Windows Login Name that they used to log in to Windows. They've connected to the **Sales1 server**, which is one of many virtual machines hosted within the office.

#### <u>Step 1 – Open the vSpace Management Console:</u>

The technician logs into the Sales1 server (using the virtual machine's console application, such as VMWare's vSphere Client). Once logged into the server, the technician launches the NComputing vSpace Management Console. (If this host were on a "bare metal" system, they could just as easily have opened an RDP session or, if the host were located in their part of the office, they could simply go to the host itself and log in to the host using an admin account.)

#### <u>Step 2 – Determine which session is being used by the device in question:</u>

Under the "L-series" section of the vSpace console, the technician would then locate the device by searching for the Windows Login Name provided under the "User Name" column of the L-series device list (outlined in **6.1 L-series** of this guide). Click at the top of any column to allow them to sort by this column to quickly find the user in question. In this scenario, we'll assume it was Session 2.

#### <u>Step 3 – Use the Session Controls to perform the desired helpdesk tasks:</u>

The technician would then open the "Sessions" section of the console (5.1 Session Overview and

**5.2 Session** Information) and left-click on Session 2 in the left navigation tree, revealing several session control options (**5.3 Session Controls**) along the top of the screen. These controls allow them to remotely view and then control the desired user session.



# 8.2 Maintenance Tasks - Performing a Firmware Update on an Active Device

In this example, we will simulate performing a firmware update on a device that is currently in use. To do this we need to give the current user advanced notice of the impending update before proceeding. This demonstrates the use of the following vSpace console features:

- Locate devices by active session ID
- Send a message to an active session via the console
- Perform a remote firmware update on multiple devices simultaneously

#### The Scenario:

As the work day winds down in a small office environment, the administrator gets ready to perform firmware updates on L-series devices throughout the building. All of the users have left for the day, with the exception of one. The administrator needs to make sure that the user is aware of the impending device update and restart before proceeding and decides to use the vSpace Management Console to accomplish this task.

#### <u>Step 1 – Locate the active session and its associated device.</u>

The administrator locates the active session using the "Sessions" section of the Management Console (**5.1 Session Overview** of this guide). If there were more than one user still active, they would all be visible in this list.

#### Step 2 - Send a message to the active session warning of the impending update.

By selecting the active session(s) found in the "Sessions" list and using the "Send Message" button (5.3 Session Controls of this guide), the administrator is able to send a text alert to the remaining user warning the user of the impending firmware update and forced device restart. This gives the user enough time to save their work and log out.

#### <u>Step 3 – Perform a remote firmware update on all selected devices.</u>

Once the remaining user has closed out their session, the administrator is free to select all of the devices in need of a firmware update in the L-series Devices list and perform a firmware update via the right-click menu (**6.1 L-series** of this guide).

# **NCOMPUTING**

# 8.3 Deployment Tasks – Installing and Configuring a new Computer Lab

For this example, we will go through the steps of initially deploying a series of devices, verifying their connectivity and performing some initial configuration tasks. These actions demonstrate the use of the following vSpace console features:

- Performing a firmware update on multiple devices simultaneously
- Storing and applying a device profile to multiple devices simultaneously

#### The Scenario:

A school is adding a lab with an additional 20-devices to their existing NComputing deployment. To expedite the deployment process, they will perform as many tasks as they can from the host rather than configuring individual devices.

#### Step 1 – Connect and Configure the First Device

After creating a host system with sufficient hardware resources for the intended user load, and completing the vSpace installation and registration process outlined in **1.1 Installing vSpace** and **1.2 Registering vSpace** of this guide, the administrator connects the first device to the host created for this lab. This device will serve as the template for the rest of the devices in the lab.

Once connected, the administrator locates the device from the host under the L-series Device list(**6.1 L-series** of this guide). The administrator right-clicks on the device and then selects "Update Device Firmware" to initiate a firmware update on the selected device. Once that process is complete and the device reboots, the administrator can double-click on the device and configure it as desired (**6.3 Information Tab through 6.9 Update Tab** of this guide).

#### <u>Step 2 – Store the First Device's Configuration Profile</u>

After completing the configuration process on the selected device, the administrator can then right-click on the device in the L-series Devices list of the console and select "Store Configuration Profile" (6.12

Creating Profiles of this guide) to save this configuration for use on the rest of the devices in the lab.

#### <u>Step 3 – Connect and Configure the Remaining Devices</u>

It is now time to connect the remaining devices. Once the devices are connected, the administrator can perform a firmware update on all of them simultaneously by selecting the group and initiating a firmware update as outlined in **Step 3**.

Once the devices have completed their firmware update, the administrator can then apply the first device's Configuration Profile to the remaining group in one step by again right-clicking on the group and selecting "Apply Configuration Profile" (as described in **6.14 Applying Profiles** of this guide).