

# **vxVistA Open Source Advanced Setup and Installation Guide**

**vxVistA version 2013.0**

**Cache 2013.1.1.501.1 for Linux OS**



**DECEMBER 5, 2013**  
**DSS, INC.**

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## Introduction

The scope of this document requires that an available window server or pc with a LAN (local area connection) to the intended Linux server be available. You may have additional windows pc that can run the application. These computers will only require the shortcuts be added.

## *Process Overview*

The purpose of this document is to inform and instruct users on how to configure Cache for Open Source vxVistA on version **2013.1.1.501.1**. This is a step by step guide for installing Cache, configuring the database in the cache system, security configuration, and configuring shortcuts and settings. Upgrading vxVistA is also covered, but not an expected requirement at the time of this documents creation. Please note that the OS used for this documentation is CentOS. Most common versions of Linux will work; however, there may be slight differences in the installation process depending on which version of Linux is used (e.g. Firewall rules).

Overview:

1. Installing Cache
2. Building the vxVistA structure
3. Creating a New Namespace
4. Setting the Global Mappings
5. Setting the Routine Mappings
6. Setting up Cache Access
7. Security Configuration
8. Connecting the Applications to the vxVistA Database\*

\* If attempting to use an existing (older) Cache database with this version of Cache please follow the instructions in the Database Upgrade Procedures section.

Cache requires a license to run; to obtaining a no-cost, 30-day trial license key for InterSystems Cache and to download Cache 2013.1.1.501.1, please contact [eval@dssinc.com](mailto:eval@dssinc.com)

## Server Configuration

### *Required Directory Structure*

<b>IMPORTANT</b>	Applications cannot be housed on a Linux server.
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#### Windows

Create the following folders

- On the primary hard drive of the windows computer create the 'vxVistaServer' folder at the root level. Example 'C:\vxVistaServer'.
  1. Right Click on the folder and Click 'Properties'.
  2. Click the 'Sharing' tab on the window that opens.
  3. Click the 'Share' button to bring up a 'File Sharing' window.
  4. Enter 'Everyone' into the space provided and push 'Add', then push 'Share'.
  5. Close the 'Properties' window and any other associated windows.
- On the primary hard drive of the windows computer create the 'PatientPictures' folder at the root level. Example 'C:\PatientPictures'.
  - Follow the above steps to turn on sharing and set it to 'Everyone'.
- On the desktop (recommended for ease of access) create the 'vxVista Applications' folder. This will be used to house shortcuts for accessing the applications.

#### Linux

1. Type 'cd /opt/' and press Enter
2. Type 'mkdir DBROOT' and press Enter
3. Type 'mkdir HFS' and press Enter
4. Type 'cd /opt/DBROOT/' and press Enter
5. Type 'mkdir V13' and press Enter
6. Type 'cd /opt' and press Enter
7. Type 'chmod 777 DBROOT' and press Enter – This grants all users access to the database
8. Type 'chmod 777 HFS' and press Enter

## Installation Files

1. Move the Cache installation file (obtained from InterSystems) into the /opt/HFS folder via the command 'cp [current location source] /opt/HFS' and press Enter.
2. Move the Cache Key (obtained from InterSystems) into the /opt/HFS folder via the command 'cp [current location] /opt/HFS' and press Enter
3. Type 'cd /opt/HFS' and press Enter
4. If install file has '.gz' and/or '.tar' in the name proceed to step 5, otherwise skip to step 6.
5. Unpacking order goes from right to left for ungzip and untar.

### EXAMPLES

'cacheinstaller'.tar.gz – do gz, then untar  
'cacheinstaller'. gz.tar – do untar, then gz

- a. GZ: type 'gunzip [cache install file name]' and press Enter.

### EXAMPLES

gunzip cache-2011.1.0.532-lnxrh5x64.tar.gz

- b. TAR: type 'tar xovf [cache install filename]' and press Enter.

6. Repeat steps 2 – 4 on the filename indicated below  
**vxVista\_2013.0\_Gold\_Linux\_Open\_Source\_2013\_11\_27.DAT.tar.gz file.**
7. Move the uncompressed DAT file into /opt/DBROOT/V13 folder via the command '**cp /opt/HFS/CACHE.DAT /opt/DBROOT/V13**' and press Enter

### IMPORTANT

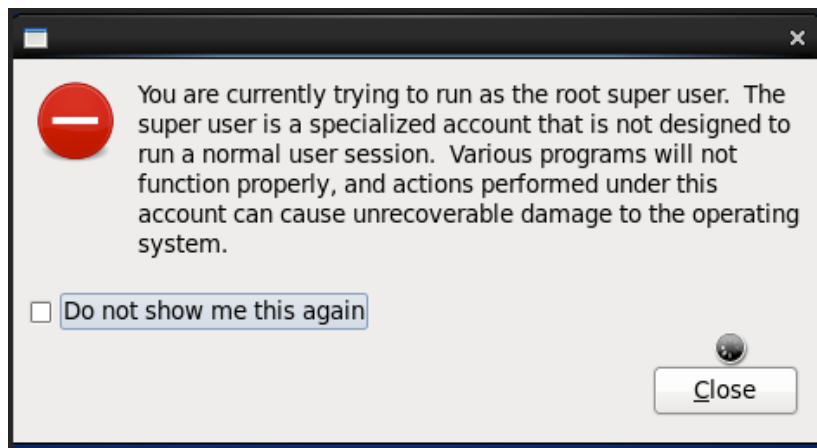
If firewall is enabled you will need to open the port 57772 and 9999 in order to access the management portal remotely. For assistance opening firewall ports see Appendix A

## Cache

### Cache Install

<b>NOTE</b>	Ensure that you are logged in with ROOT Credentials. This is required for Installation.
-------------	---

1. If you are not logged in as ROOT.
  1. Logout.
  2. At the login screen Click 'Other...?'.  - 3. Enter Username 'root'.
  - 4. Enter root user Password.
2. If the error message below appears click the 'Close' button.



3. Click Applications -> System Tools -> Terminal.
4. Type 'cd /opt/HFS'. and press Enter
5. Type './cinstall' and press Enter.
6. Press 1 for RedHat Linux.
7. Press Enter to accept the default name CACHE.
8. At the 'enter a destination for the new instance', type '/opt/InterSystems' and press Enter.
9. If the system are prompted by the system that the "directory does not exist...", answer yes.
10. Select 1 for Development Install.
11. Enter No for Unicode Support.
12. Use default security setting of 1 for minimal.

13. Enter group name that will have permission to start/stop Cache.

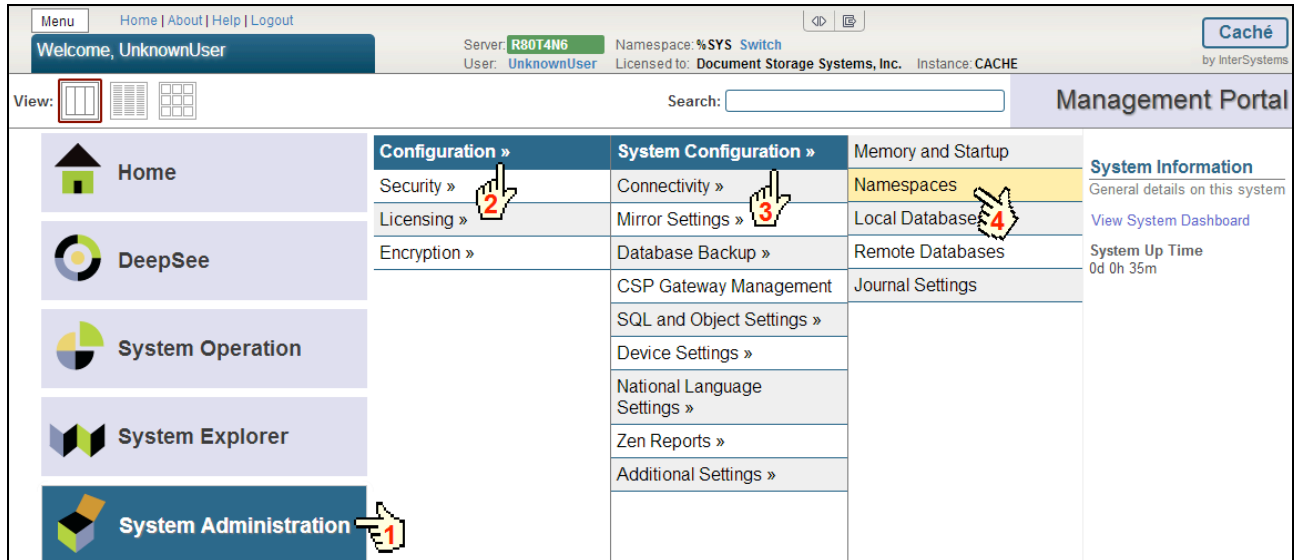
**NOTE**

A New group can be created for this purpose or root users group can be selected by entering 0.

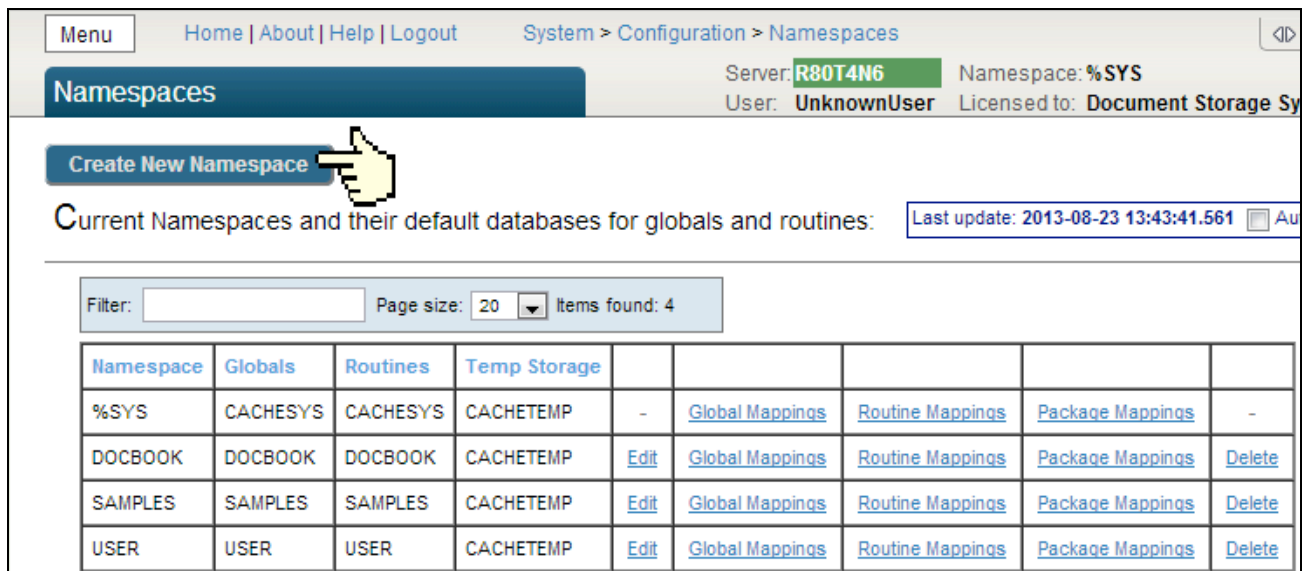
14. Enter No for License Key.
15. At the next prompt enter Yes.
16. Test connection by going to [http://\[IPADDRESS\]:57772/csp/sys/UtilHome.csp](http://[IPADDRESS]:57772/csp/sys/UtilHome.csp) from a Web Browser.
17. Copy Cache License Key into the /opt/InterSystems/mgr folder via the command 'cp /opt/HFS/cache.key /opt/InterSystems/mgr/cache.key' and press Enter.
18. To activate license key type '*cd /opt/InterSystems/*' and press Enter
19. then type **./cstop** and press enter
20. Press Enter for all the prompts that follow until 'ARE YOU READY FOR THE SYSTEM TO HALT' and press enter once again to stop.
21. Wait for Cache to stop. Then type **./cstart** and press enter. This will activate Cache License Key.

## Configuring the vxVistA Namespace

1. Open a web browser and navigate to:  
[http://\[server ip address\]:57772/csp/sys/UtilHome.csp](http://[server ip address]:57772/csp/sys/UtilHome.csp).
2. Click 'System Administration>Configuration>System Configuration>Namespaces'

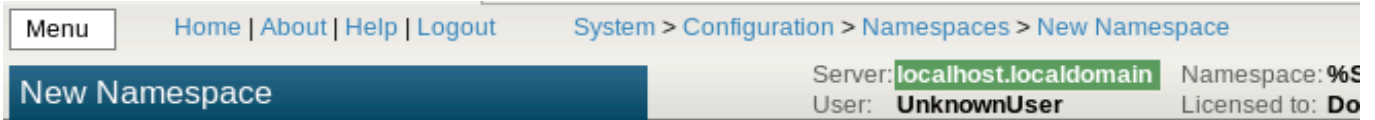


3. Click the 'Create New Namespace' button.

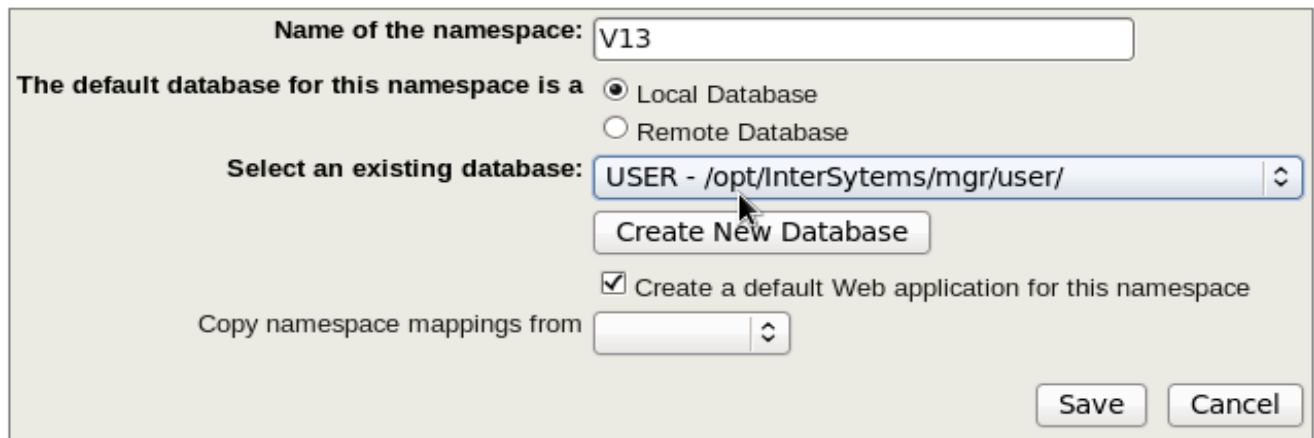




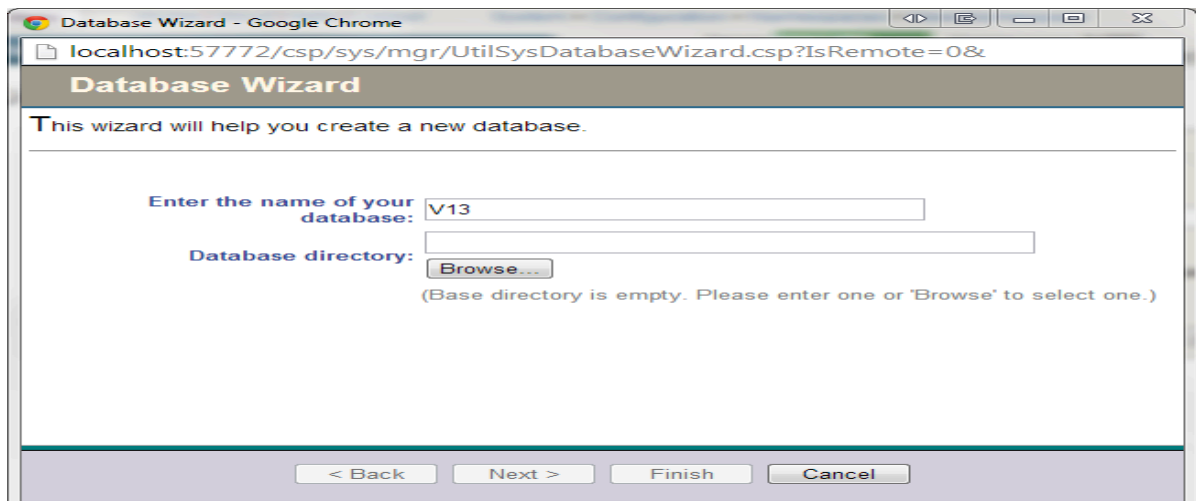
4. In the 'Name of the namespace:' page, enter 'V13' and click 'Create New Database'.



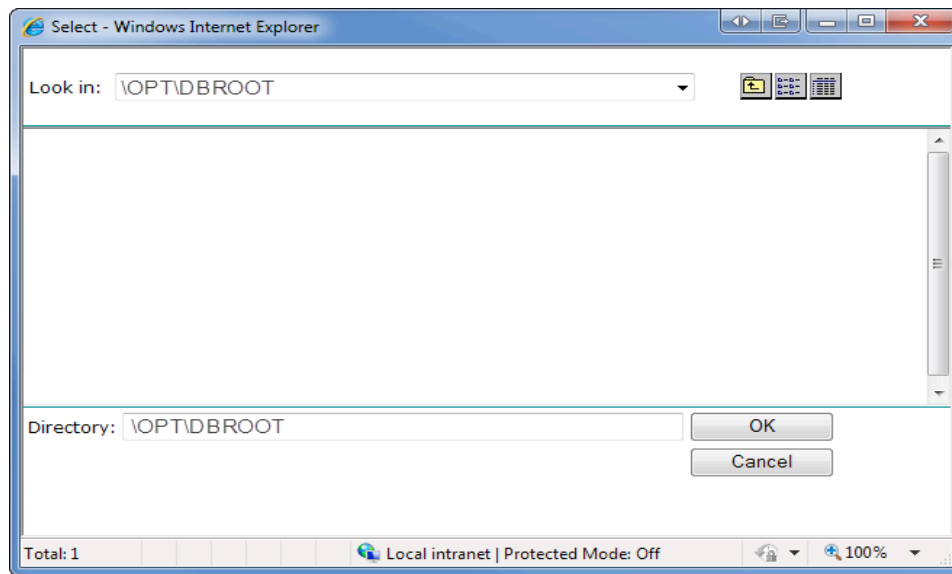
Use the form below to create a new namespace:



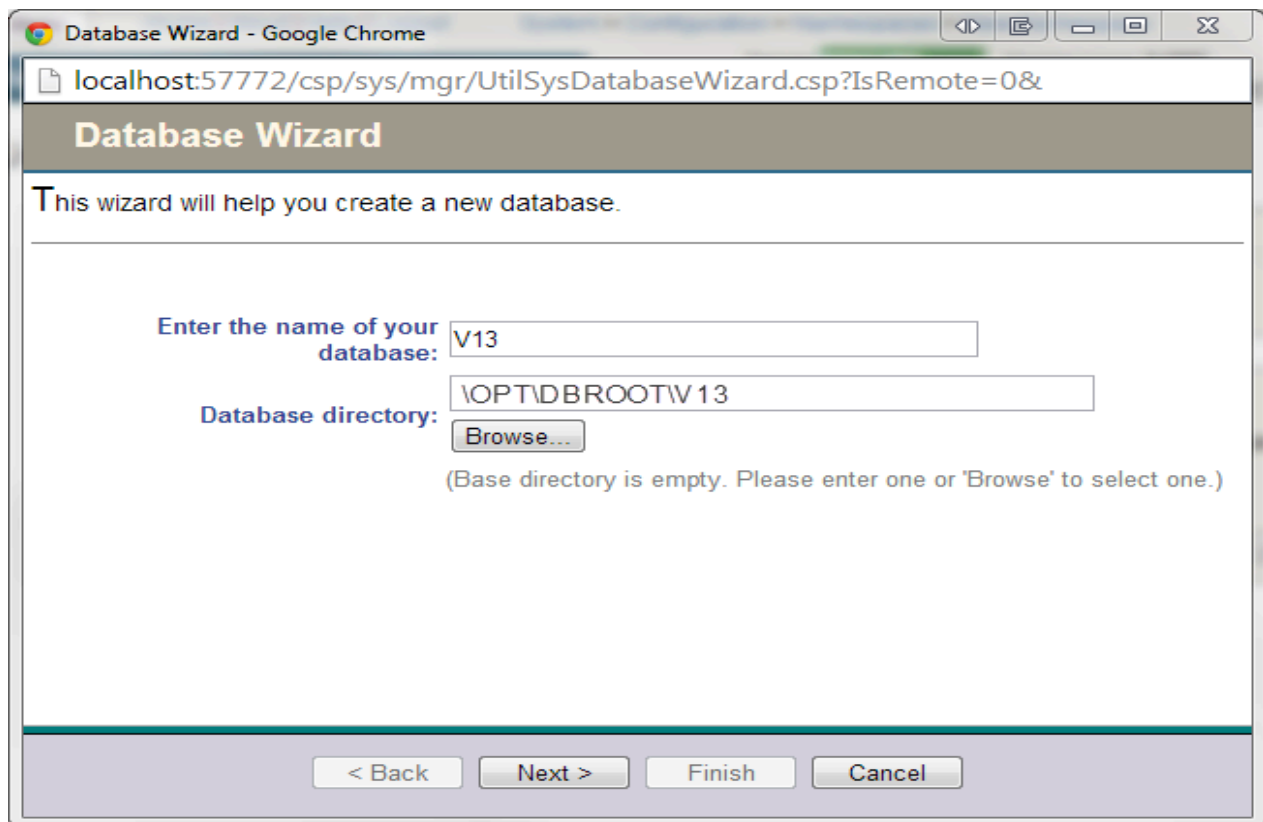
5. The Database Wizard displays asking for the database name and location. Enter the name 'V13' and click the 'Browse...' button.



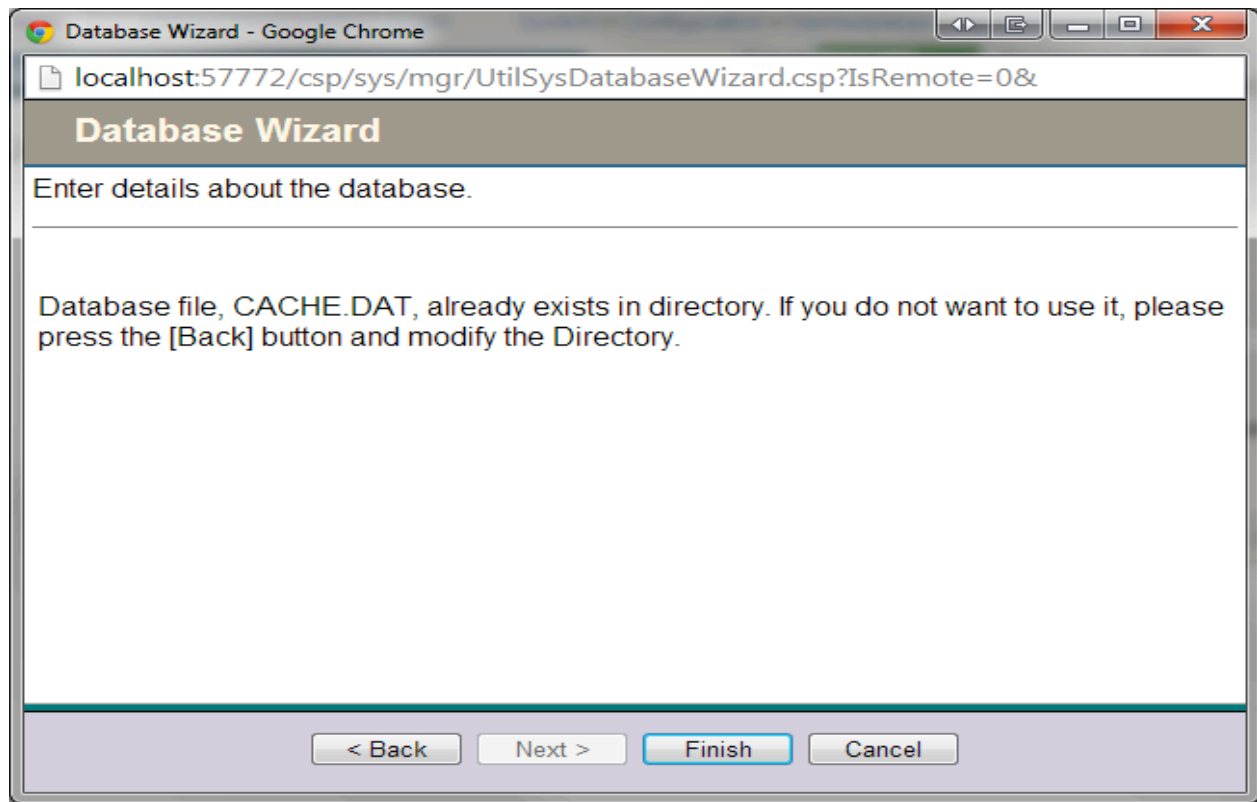
6. Click the folder up icon to navigate to the drive that the DBROOT folder was placed. Then click the 'Look in:' drop down arrow and navigate to the 'V13' folder created earlier. Click 'OK' to continue.



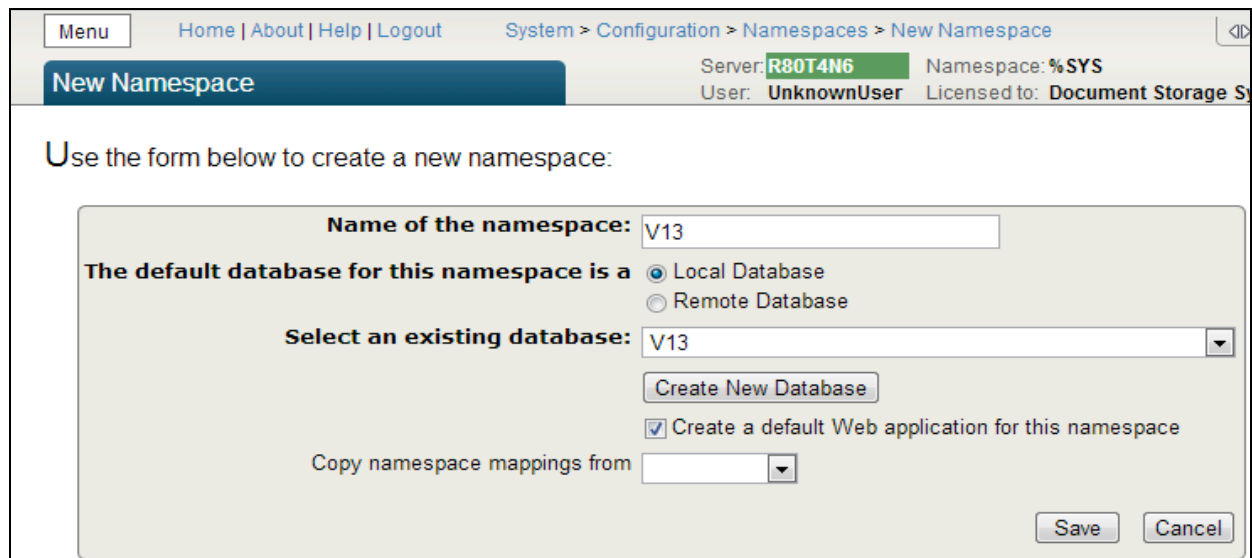
7. The Database Wizard will now be updated to the location of the existing folder and database. Click 'Next'.



8. The Wizard will warn that there is an existing CACHE.DAT file in the location it's pointing to. This message is expected. If this message is not received the location is either incorrect or the database was failed to be copied into the correct directory. Click 'Finish'.



9. Focus will be returned to the namespace configuration page. 'Save' must be clicked to save the existing configuration completely and correctly.



10. The vxVista database has now been mounted into the Cache system.

## Database Upgrade Procedures

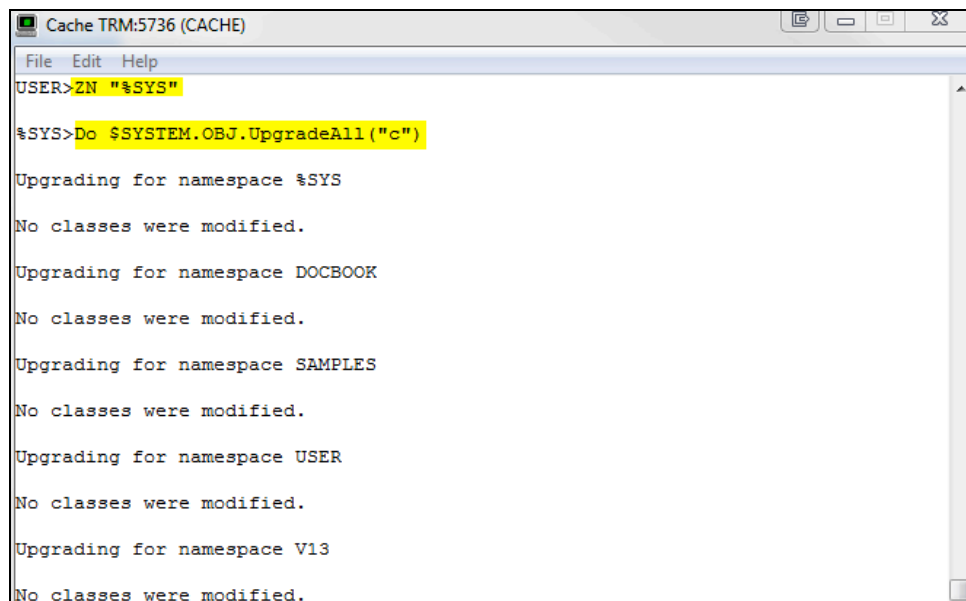
Before adding the Global Mappings and Routine Mappings it's important to verify that the correct Cache version is in use. Verify Cache version by opening Terminal and typing 'ccontrol list' to display the current Cache version information.

If Cache 2013.1.1.501.1 is being used no upgrade is needed, skip this page and go to the 'Adding Global and Routine Mappings'. If currently using a version greater than Cache 2013.1.1.501.1, please follow the 'Upgrading Procedures' to upgrade to the current cache.dat version. Once the upgrade is complete, continue on to the 'Adding Global and Routine Mappings' section.

### *Upgrading the Database*

Open the Cache Terminal and follow the commands as seen in the windows.

**NOTE** To open the Cache Terminal go to Terminal and type 'csession CACHE' or 'cache'



```
Cache TRM:5736 (CACHE)
File Edit Help
USER>ZN "%SYS"
%SYS>Do $SYSTEM.OBJ.UpgradeAll("c")
Upgrading for namespace %SYS
No classes were modified.
Upgrading for namespace DOCBOOK
No classes were modified.
Upgrading for namespace SAMPLES
No classes were modified.
Upgrading for namespace USER
No classes were modified.
Upgrading for namespace V13
No classes were modified.
```

### *Recompiling the Database*

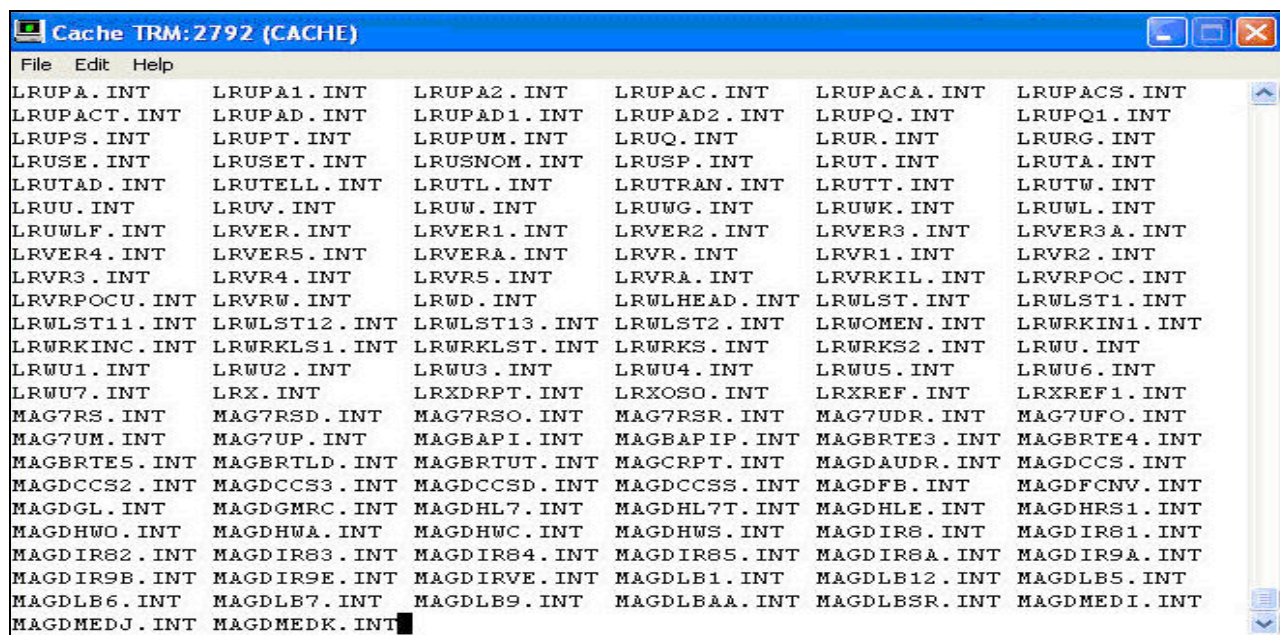
After performing the upgrade, enter the following lines into the Cache Terminal.

- 1.%SYS>ZN "V13" **\*to switch namespace**
- 2.V13>D ^%RCOMPIL **\*the command to recompile the upgraded database**
- 3.Press [Enter] to continue. This option recompiles all VistA routines and must be performed after upgrading.
- 4.At the Routine(s): prompt *type: \**
- 5.Press [ENTER] to continue.

6. Take care here to only key **[ENTER]** once at the next Routine(s): **DO NOT HIT [ENTER] AGAIN!**
7. At this point, this process will pause here for 3-5 minutes. At the Display syntax errors? Yes => *type*: **NO**
8. Press enter to continue.
9. Press enter for three prompts until the auto recompile begins.

```
Routine(s): *
Routine(s): Press enter here
(3-5 minutes pause here)
Display syntax errors? Yes => NO
Display on
Device:
Right margin: 80 => █
```

10. All routines being recompiled will display. Once this action is complete, press “^” to return to the V13> namespace prompt.

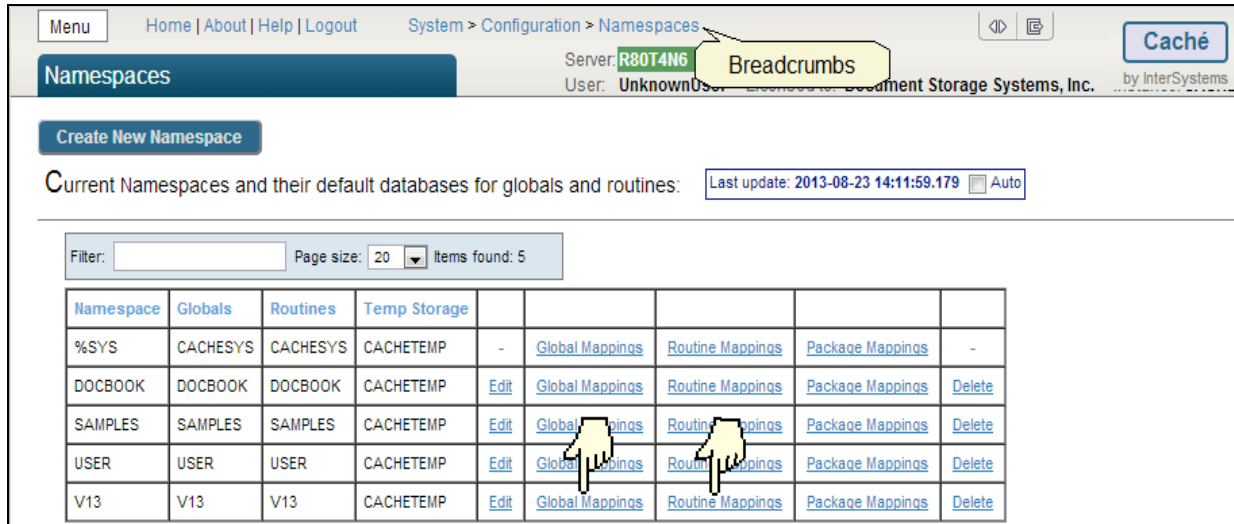


## Configuring Global and Routine Mappings

### Global Mappings

In order for the Namespace (database) to function correctly Globals and Routines must be mapped.

1. Navigate to the Namespace page 'System>Configuration>Namespaces' (pay attention to the breadcrumbs on pages when navigating through the Cache system to help with location identification) and click the Global Mappings link associated with the 'V13' namespace that was created.



Menu Home | About | Help | Logout System > Configuration > Namespaces Server: R80T4N6 User: UnknownUser

Namespaces

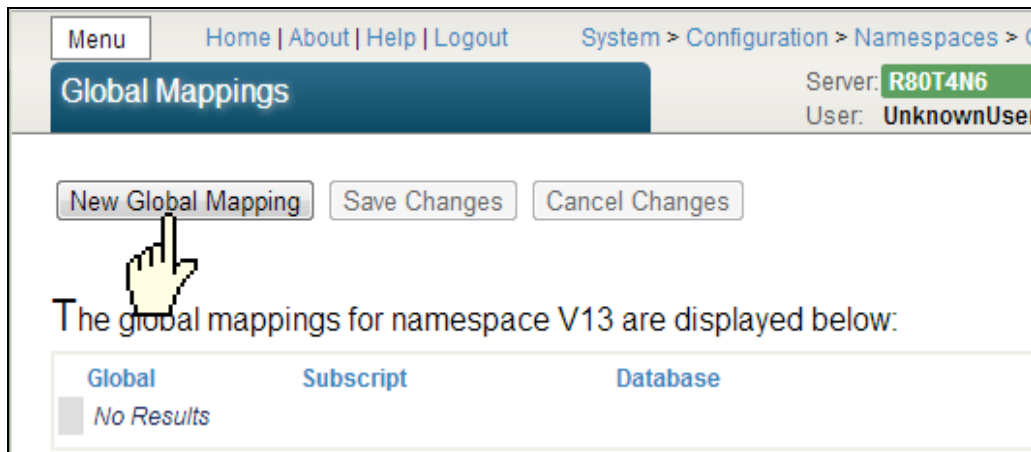
Create New Namespace

Current Namespaces and their default databases for globals and routines: Last update: 2013-08-23 14:11:59.179 Auto

Filter: Page size: 20 Items found: 5

Namespace	Globals	Routines	Temp Storage					
%SYS	CACHESYS	CACHESYS	CACHETEMP	-	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	-
DOCBOOK	DOCBOOK	DOCBOOK	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>
SAMPLES	SAMPLES	SAMPLES	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>
USER	USER	USER	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>
V13	V13	V13	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>

2. Click the 'New Global Mapping' button.



Menu Home | About | Help | Logout System > Configuration > Namespaces > Global Mappings Server: R80T4N6 User: UnknownUser

Global Mappings

New Global Mapping Save Changes Cancel Changes

The global mappings for namespace V13 are displayed below:

Global	Subscript	Database
No Results		

- The Global Mapping dialog box displays to allow entering of necessary elements. Click the dropdown arrow for the 'Global database location:' to set that value as needed and enter the text as seen in the table below so that it corresponds to that database and click 'Apply' or press the [Enter] key each time to enter the value.

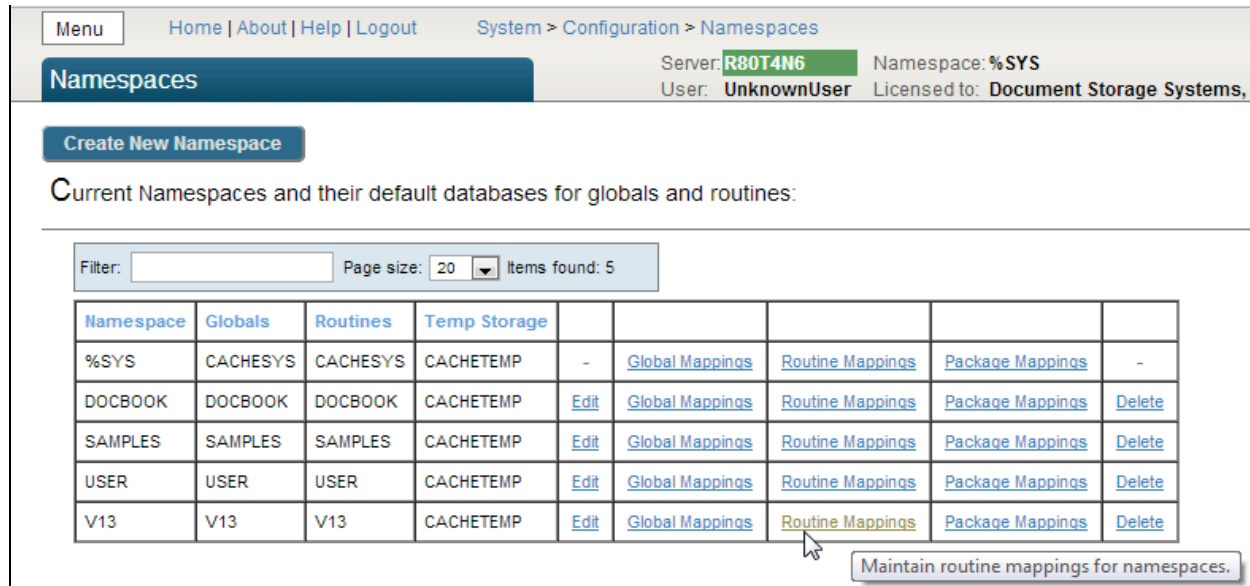
Global database location:	Global name:
V13	%Z*
CACHETEMP	TMP
CACHETEMP	UTILITY

- If any mistakes are made during the entry of the table values it is possible to correct or remove this from the 'Edit' or 'Delete'.
- Upon successful completion of entering all the Globals above click 'Close' and focus should return to the main Global Mappings page if it doesn't click 'Namespace' in the breadcrumb at the top center of the page. Click the 'Save Changes' button to complete the operation.



## Routine Mappings

- After the Global mappings are complete, return to the Namespace page and click the 'Routine Mappings' link for V13.



Menu Home | About | Help | Logout System > Configuration > Namespaces

Namespaces Server: R80T4N6 Namespace: %SYS User: UnknownUser Licensed to: Document Storage Systems,

Create New Namespace

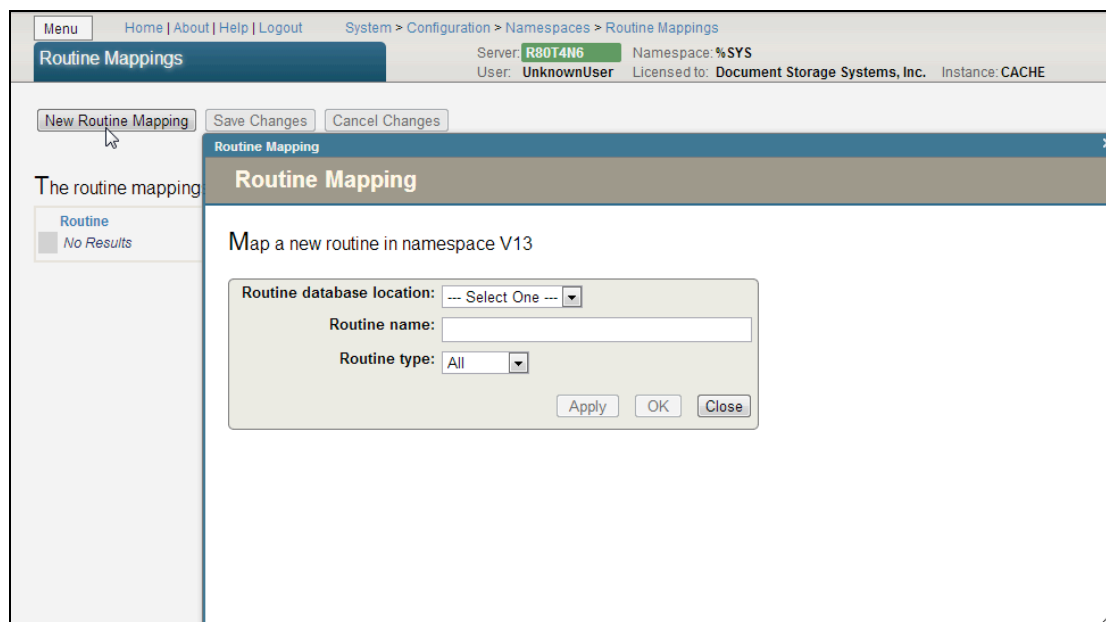
Current Namespaces and their default databases for globals and routines:

Filter: Page size: 20 Items found: 5

Namespace	Globals	Routines	Temp Storage					
%SYS	CACHESYS	CACHESYS	CACHETEMP	-	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	-
DOCBOOK	DOCBOOK	DOCBOOK	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>
SAMPLES	SAMPLES	SAMPLES	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>
USER	USER	USER	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>
V13	V13	V13	CACHETEMP	<a href="#">Edit</a>	<a href="#">Global Mappings</a>	<a href="#">Routine Mappings</a>	<a href="#">Package Mappings</a>	<a href="#">Delete</a>

Maintain routine mappings for namespaces.

- Click on 'New Routine Mapping' and the "Routine Mapping" dialog displays for adding them to the namespace.



Menu Home | About | Help | Logout System > Configuration > Namespaces > Routine Mappings

Routine Mappings Server: R80T4N6 Namespace: %SYS User: UnknownUser Licensed to: Document Storage Systems, Inc. Instance: CACHE

New Routine Mapping Save Changes Cancel Changes

The routine mapping

Routine No Results

Routine Mapping

Map a new routine in namespace V13

Routine database location: --- Select One ---

Routine name:

Routine type: All

Apply OK Close

- Select the appropriate 'Routine database location:' and add the appropriate routine text as indicated in the table below.



9. Click 'Apply' or the [Enter] key after adding each entry

Routine Database location	Routine Name
V13	%DT*
V13	%RCR
V13	%XU*
V13	%ZI*
V13	%ZO*
V13	%ZT*
V13	%ZV*

10. Click the close button upon completing the entry of all table values

11. If any mistakes are made during the entry of the table values it is possible from the 'Edit' or 'Delete'. Click the 'Save Changes' button to complete the Routine Mapping process.

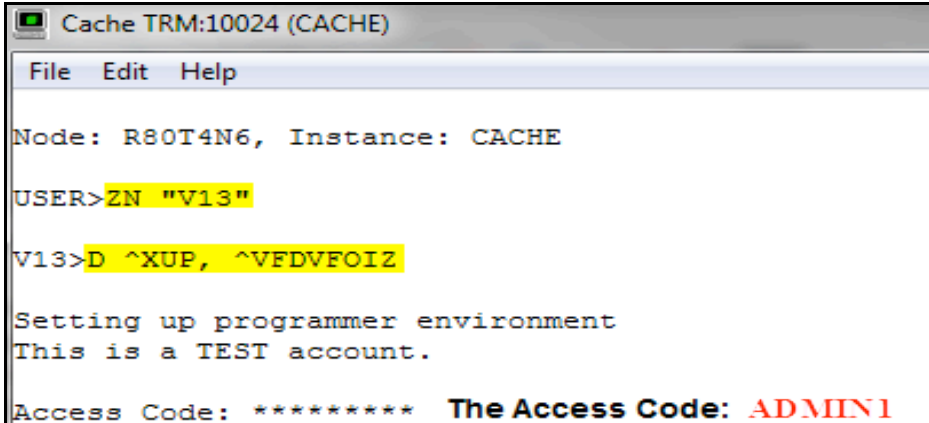
## Database Configuration via the VFDVFOIZ Routine

The VFDVFOIZ Routine is necessary to run:

- Every time a database is moved within the same computer into a new instance of Cache that is not the same name as the instance the database came from
- If the Cache database is relocated to a different computer

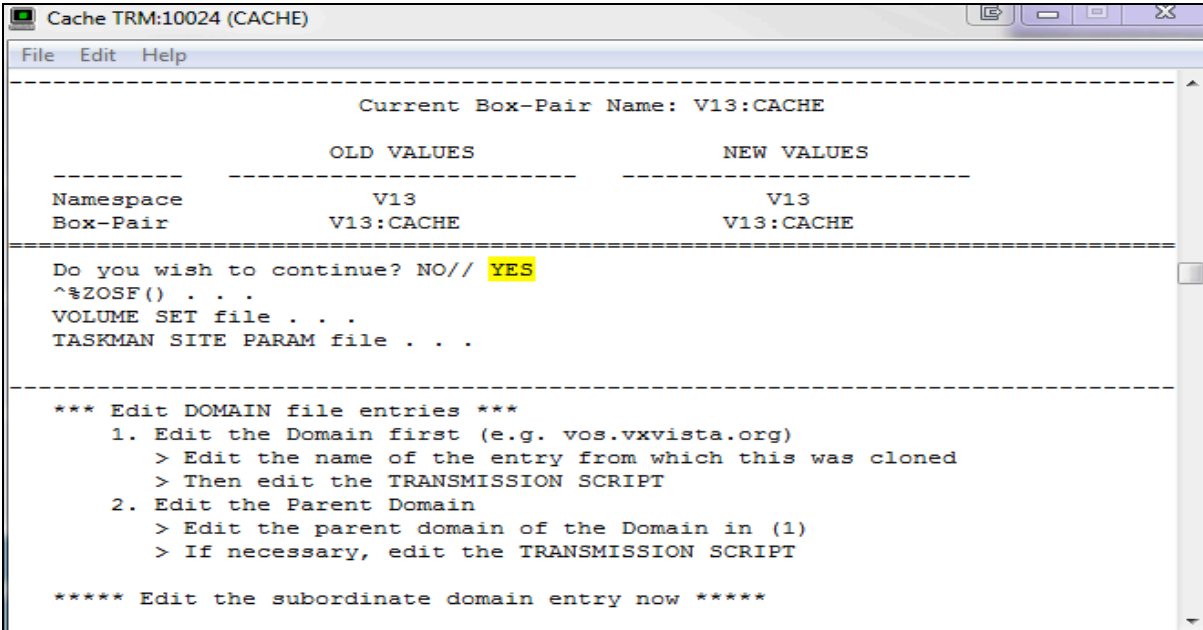
To determine the name of an existing Cache instance open the terminal and type 'ccontrol list'.

1. Open Terminal Window. System->Terminal.
2. To enter the Cache Terminal type 'cache' or "csession CACHE".
3. Type the commands as shown in yellow highlight below to navigate into the new V13 namespace that was created.
4. The Access Code: **ADMIN1**



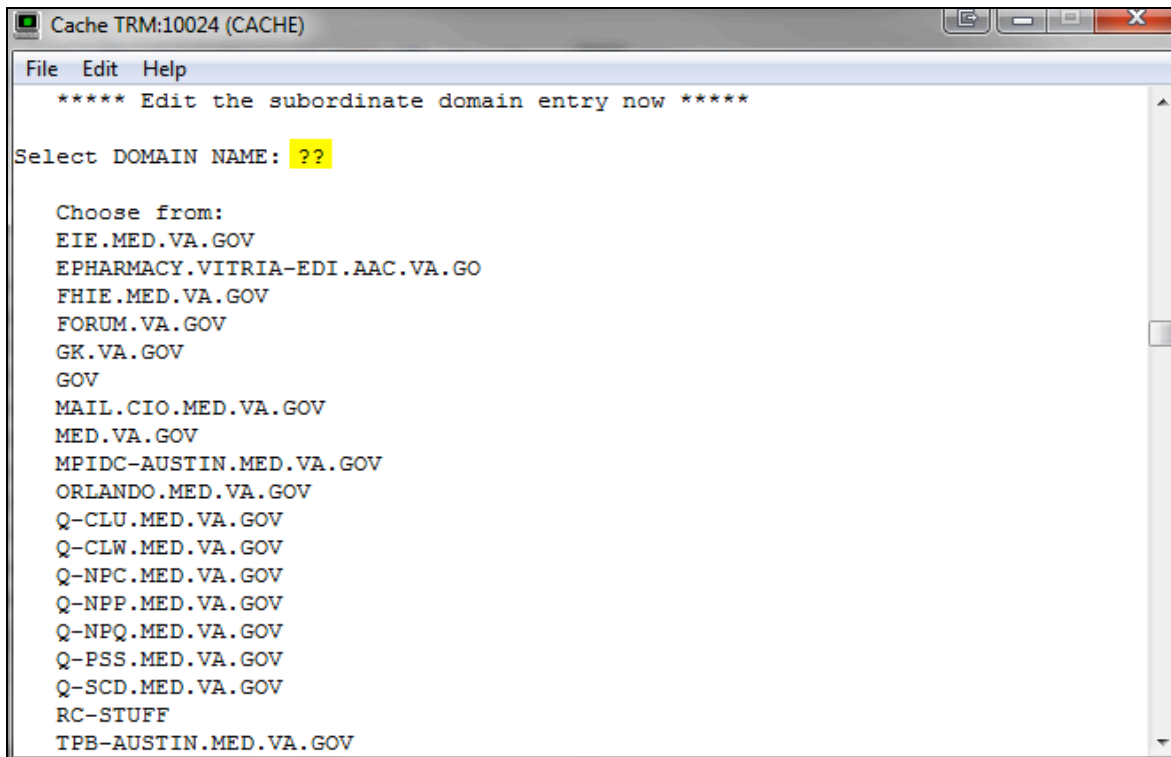
```
Cache TRM:10024 (CACHE)
File Edit Help
Node: R80T4N6, Instance: CACHE
USER>ZN "V13"
V13>D ^XUP, ^VFDVFOIZ
Setting up programmer environment
This is a TEST account.
Access Code: ***** The Access Code: ADMIN1
```

5. Continue to follow and input the yellow highlighted text through the next several screen shots

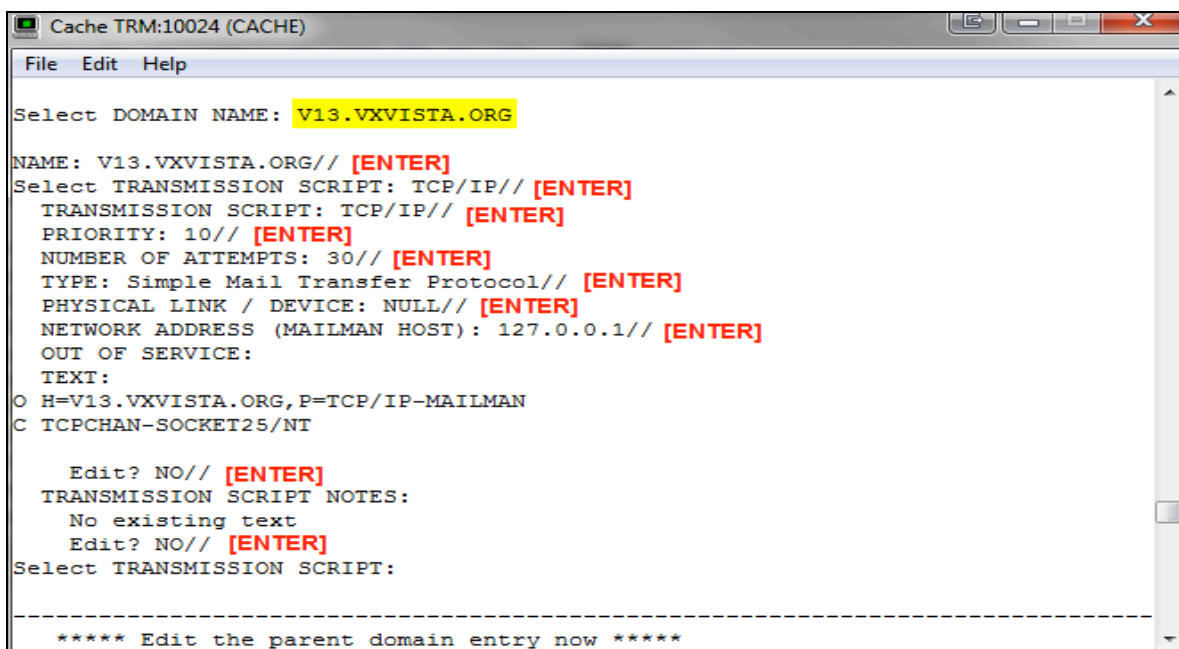


```
Cache TRM:10024 (CACHE)
File Edit Help
-----
Current Box-Pair Name: V13:CACHE
-----
          OLD VALUES          NEW VALUES
-----
Namespace      V13            V13
Box-Pair        V13:CACHE        V13:CACHE
-----
Do you wish to continue? NO// YES
^%ZOSF() . . .
VOLUME SET file . . .
TASKMAN SITE PARAM file . . .
-----
*** Edit DOMAIN file entries ***
1. Edit the Domain first (e.g. vos.vxvista.org)
   > Edit the name of the entry from which this was cloned
   > Then edit the TRANSMISSION SCRIPT
2. Edit the Parent Domain
   > Edit the parent domain of the Domain in (1)
   > If necessary, edit the TRANSMISSION SCRIPT
***** Edit the subordinate domain entry now *****
```

6. If unsure typing in '??' will generate a list of possible entries at all points where the system is expecting user input.



7. At the next prompt, enter the subordinate Domain Entry, which for the purpose of this install is 'V13.VXVISTA.ORG' and follow the [ENTER] keystroke prompts.



8. The next section requires the parent Domain information

Cache TRM:10024 (CACHE)

File Edit Help

\*\*\*\*\* Edit the parent domain entry now \*\*\*\*\*

Select DOMAIN NAME: **VXVISTA.ORG**

NAME: VXVISTA.ORG// [ENTER]

Select TRANSMISSION SCRIPT: TCP/IP// [ENTER]

TRANSMISSION SCRIPT: TCP/IP// [ENTER]

PRIORITY: 10// [ENTER]

NUMBER OF ATTEMPTS: 30// [ENTER]

TYPE: Simple Mail Transfer Protocol// [ENTER]

PHYSICAL LINK / DEVICE: NULL// [ENTER]

NETWORK ADDRESS (MAILMAN HOST): 127.0.0.1// [ENTER]

OUT OF SERVICE:

TEXT:

O H=V13.VXVISTA.ORG,P=TCP/IP-MAILMAN

C TCPCHAN-SOCKET25/NT

Edit? NO// [ENTER]

TRANSMISSION SCRIPT NOTES:

No existing text

Edit? NO// [ENTER]

Select TRANSMISSION SCRIPT:

-----

9. Next information required is the Institution Name

Cache TRM:10024 (CACHE)

File Edit Help

Get that assigned number before proceeding any further

Do you wish to continue? NO// YES

Select INSTITUTION NAME: **??**

Choose from:

AUSTIN MHV	TX	OTHER	200MH
DOCUMENT STORAGE SYSTEMS		MC (M)	050
TELEHEALTH AMD	TX	OTHER	200T2
TELEHEALTH AMERICAN TELECARE	TX	OTHER	200T6
TELEHEALTH HEALTH HERO	TX	OTHER	200T1
TELEHEALTH VITEL NET	TX	OTHER	200T4
TELEHEALTH VITERION	TX	OTHER	200T5
VXVISTA.ORG		MC (M)	100

You may enter a new INSTITUTION, if you wish

This is the name of the institution with out modifiers like state or type.

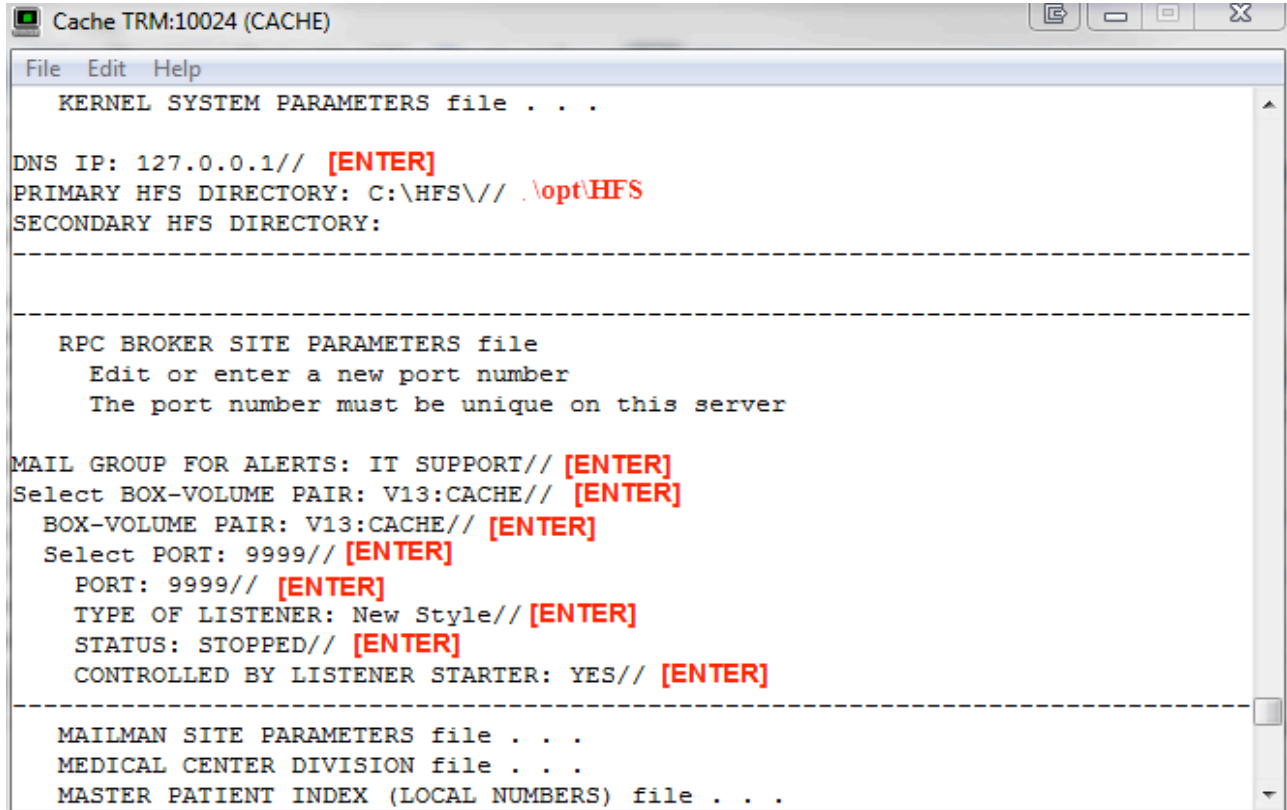
Select INSTITUTION NAME: **VXVISTA.ORG** MC (M) 100

-----

KERNEL SYSTEM PARAMETERS file . . .

DNS IP: 127.0.0.1// [ENTER]

10. After [ENTER]ing through the remainder of the installation, the command prompt will return to the 'V13>' namespace prompt.



```
Cache TRM:10024 (CACHE)
File Edit Help
  KERNEL SYSTEM PARAMETERS file . . .

DNS IP: 127.0.0.1// [ENTER]
PRIMARY HFS DIRECTORY: C:\HFS\\ .\opt\HFS
SECONDARY HFS DIRECTORY:
-----

RPC BROKER SITE PARAMETERS file
  Edit or enter a new port number
  The port number must be unique on this server

MAIL GROUP FOR ALERTS: IT SUPPORT// [ENTER]
Select BOX-VOLUME PAIR: V13:CACHE// [ENTER]
BOX-VOLUME PAIR: V13:CACHE// [ENTER]
Select PORT: 9999// [ENTER]
PORT: 9999// [ENTER]
TYPE OF LISTENER: New Style// [ENTER]
STATUS: STOPPED// [ENTER]
CONTROLLED BY LISTENER STARTER: YES// [ENTER]
-----

MAILMAN SITE PARAMETERS file . . .
MEDICAL CENTER DIVISION file . . .
MASTER PATIENT INDEX (LOCAL NUMBERS) file . . .
```

11. Close Terminal.

## Security Configuration

### *OpenSSH Installations under CentOS Linux*

**NOTE**

Yum, apt-get, dpkg, or yast must be installed to perform next step.

Open a Terminal Window.

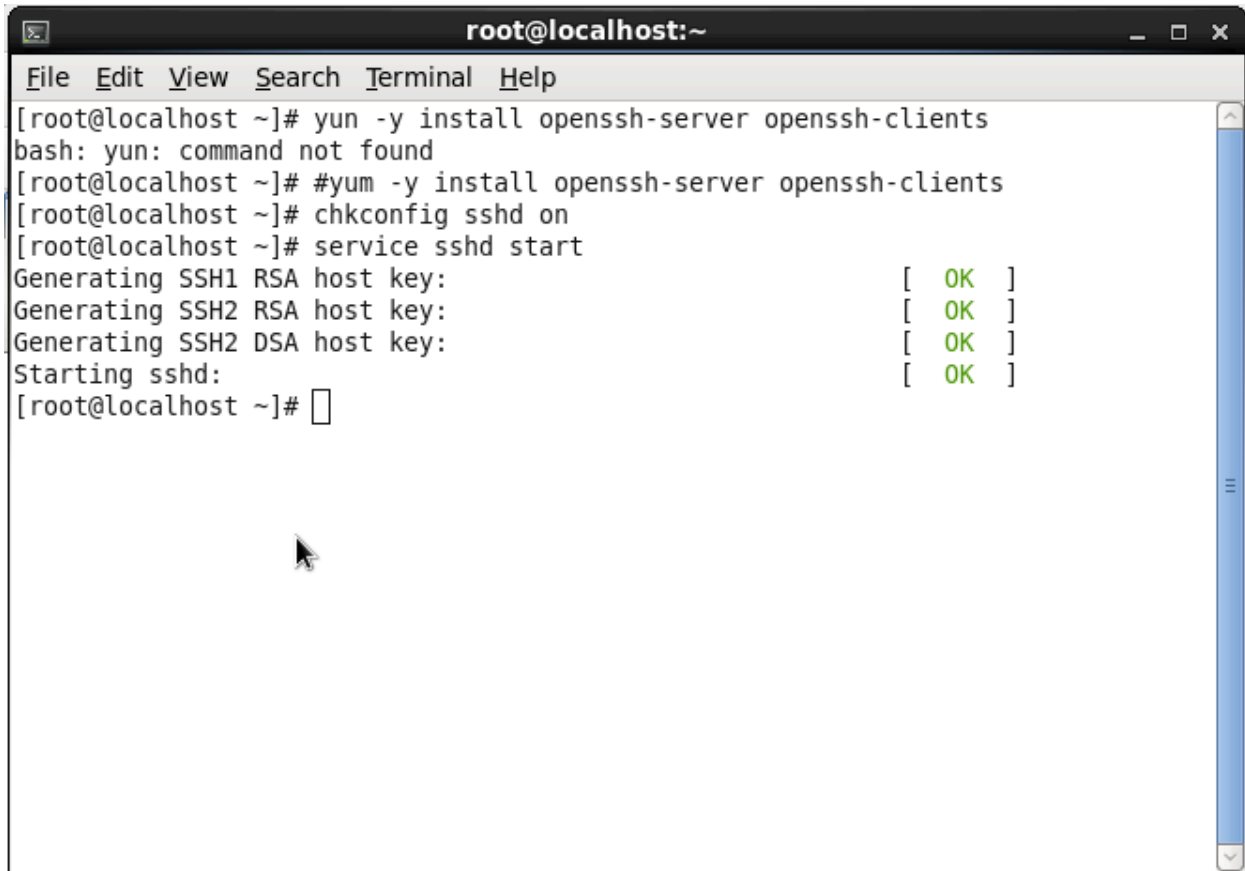
To install the server and client type:

```
# yum -y install openssh-server openssh-clients then press Enter
```

Start the service:

```
# chkconfig sshd on then press Enter
```

```
# service sshd start then press Enter
```



```
root@localhost:~  
File Edit View Search Terminal Help  
[root@localhost ~]# yum -y install openssh-server openssh-clients  
bash: yum: command not found  
[root@localhost ~]# #yum -y install openssh-server openssh-clients  
[root@localhost ~]# chkconfig sshd on  
[root@localhost ~]# service sshd start  
Generating SSH1 RSA host key: [ OK ]  
Generating SSH2 RSA host key: [ OK ]  
Generating SSH2 DSA host key: [ OK ]  
Starting sshd: [ OK ]  
[root@localhost ~]#
```

## Update the WebServerPort

The 'WebServerPort' is not normally needed to be updated except in larger multi namespace environments. It is necessary to identify the port number for adding remote Cache connection (not covered in the scope of this document) and for IT Departments.

1. Return to the 'System Administration' page and follow the path as shown below and click 'Startup' link to edit the 'WebServerPort'.

The screenshot shows a web browser window displaying the 'CACHE - Home - Mozilla Firefox' page. The address bar shows the URL: `http://localhost:57772/csp/sys/mgr/%25CSP.Portal.Home.zen?NAMESPACE=%SYS`. The page header includes a navigation menu with 'Home', 'About', 'Help', and 'Logout'. Below the header, there is a 'Welcome, UnknownUser' message and a 'Search' field. The main content area is divided into a left sidebar with navigation links (Home, DeepSee, System Operation, System Explorer, System Administration) and a central grid of links. The 'Startup' link under 'CSP Gateway Management' is highlighted with a yellow background and a tooltip that says 'Navigate to this item.' The right sidebar contains 'System Information' details, including 'System Up Time' and '0d 0h 55m'.

2. Click the 'Edit' link next to the 'WebServerPort' entry.

Menu Home | About | Help | Logout System > Configuration > Startup Settings

**Startup Settings** Server: **R80T4N6** User: **UnknownUser**

The following is a list of system startup settings:

Setting	Value	Edit	Help
CallinHalt	true	<a href="#">Edit</a>	<a href="#">Help</a>
CallinStart	true	<a href="#">Edit</a>	<a href="#">Help</a>
CliSysName		<a href="#">Edit</a>	<a href="#">Help</a>
DBSizesAllowed	8192	<a href="#">Edit</a>	<a href="#">Help</a>
DefaultPortBindAddress		<a href="#">Edit</a>	<a href="#">Help</a>
ErrorPurge	30	<a href="#">Edit</a>	<a href="#">Help</a>
IPv6	false	<a href="#">Edit</a>	<a href="#">Help</a>
JobHalt	true	<a href="#">Edit</a>	<a href="#">Help</a>
JobServers	0	<a href="#">Edit</a>	<a href="#">Help</a>
JobStart	true	<a href="#">Edit</a>	<a href="#">Help</a>
MaxCacheTempSizeAtStart	0	<a href="#">Edit</a>	<a href="#">Help</a>
MaxConsoleLogSize	5	<a href="#">Edit</a>	<a href="#">Help</a>
ProcessHalt	true	<a href="#">Edit</a>	<a href="#">Help</a>
ProcessStart	true	<a href="#">Edit</a>	<a href="#">Help</a>
ShutdownTimeout	300	<a href="#">Edit</a>	<a href="#">Help</a>
SystemHalt	true	<a href="#">Edit</a>	<a href="#">Help</a>
SystemStart	true	<a href="#">Edit</a>	<a href="#">Help</a>
TempDirectory	Temp	<a href="#">Edit</a>	<a href="#">Help</a>
TerminalPrompt	8,2	<a href="#">Edit</a>	<a href="#">Help</a>
WebServer	true	<a href="#">Edit</a>	<a href="#">Help</a>
WebServerName		<a href="#">Edit</a>	<a href="#">Help</a>
WebServerPort	57772	<a href="#">Edit</a>	<a href="#">Help</a>
WebServerURLPrefix		<a href="#">Edit</a>	<a href="#">Help</a>
ZSTU	true	<a href="#">Edit</a>	<a href="#">Help</a>

3. Change to the desired port number and click the 'Save' button.

Menu Home | About | Help | Logout System > Configuration > Startup Settings > Edit Startup Settings

**Edit Startup Settings** Server: **R80T4N6** Namespace: **%SYS** User: **UnknownUser** Licensed to: **Docu**

Use the form below to edit a startup setting:

WebServerPort:

Required. Please enter a value of type %Library.Integer.

Private WebServer port.

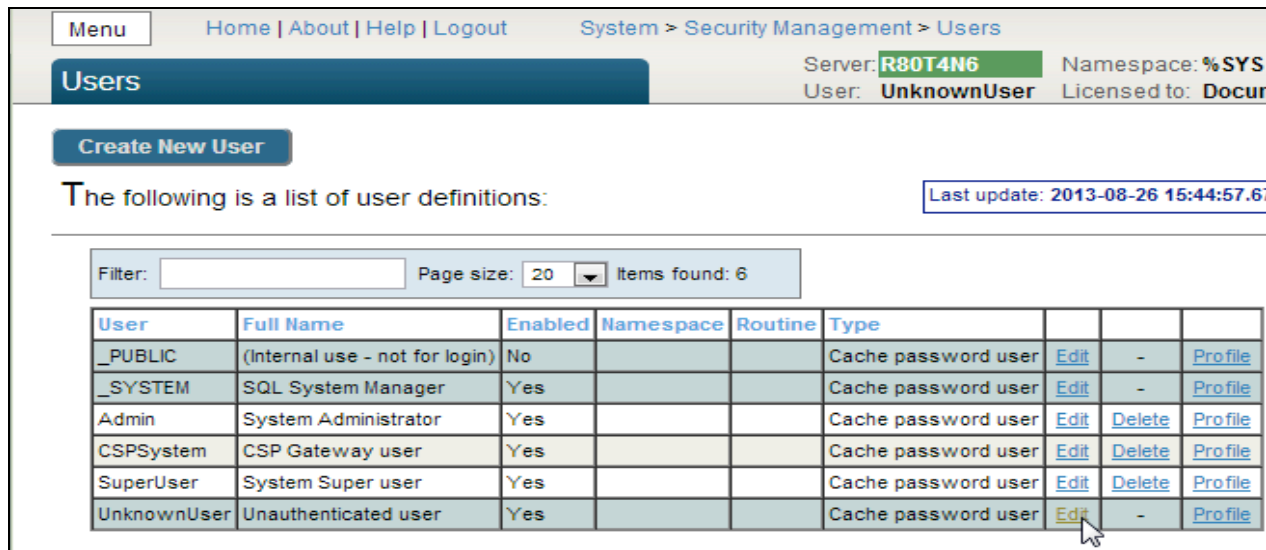


### Setting up the unknown User

- Return to the System Administration page and follow the path as shown in the image below. Click the 'Users' link.



- Click the 'Edit' link next to the UnknownUser profile.



- Select 'V13' in the 'Startup Namespace:' dropdown.

7. Enter '^ZU' text in the 'Startup Tag^Routine:' textbox.

Menu
Home | About | Help | Logout
System > Security Management > Users > Edit User

Edit User
Server: PBM22NZ
Names:
User: UnknownUser
Licens:

Profile

Edit definition for user UnknownUser:

[General]
Roles
SQL Privileges
SQL Tables
S

Name\*: UnknownUser
Full Name: Unauthenticated user
Comment:
Password\*:
Confirm Password\*:
Change password on next login: ☐
User Enabled: ☒
Expiration Date: (yyyy-mm-dd)
Startup Namespace: V13
Startup Tag^Routine: ^ZU

Two-factor Authentication
Mobile phone service provider: Create new provider
Mobile phone number:

\* Indicates a required field.
Save
Close

8. Click the 'Save' button.

9. Click the 'Roles' tab while still in the UnknownUser and click the 'Grant Option' checkbox to provide all the necessary permissions. Resaving is not required. Close the 'Management Portal'.

The screenshot shows the 'Edit User' interface for 'UnknownUser'. The 'Roles' tab is selected, showing a table with the role '%All' and a checked 'Grant Option' checkbox. Below the table, there is a section for assigning roles to the user, with 'Available' and 'Selected' lists. The 'Available' list contains various database roles like '%DB\_%DEFAULT', '%DB\_CACHE', etc. The 'Selected' list is empty. Buttons for 'Assign' and 'Assign with Grant Option' are present. A hand cursor points to the 'Grant Option' checkbox in the table above.

UnknownUser is Assigned to the Following Roles		Grant Option
%All	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Assign user **UnknownUser** to one or more roles:

**Available**

----- Select One or More -----

- %DB\_%DEFAULT
- %DB\_CACHE
- %DB\_CACHEAUDIT
- %DB\_CACHELIB
- %DB\_CACHESYS
- %DB\_CACHETEMP
- %DB\_DOCBOOK
- %DB\_SAMPLES
- %DB\_USER
- %Developer

**Selected**

----- Items Selected -----

Assign with Grant Option

Hold the [Shift] or [Ctrl] key while clicking to select multiple.

## Download and Configuration of PuTTY

PuTTY is a free telnet and SSH Client for Windows and UNIX platforms.

### NOTE

The steps in this section will need to be completed on a windows computer that is connected via a network to the Linux machine.

1. Type or copy in the web address below into your web browser (or simply search 'Putty').

<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>.

### PuTTY Download Page

[Home](#) | [Licence](#) | [FAQ](#) | [Docs](#) | **Download** | [Keys](#) | [Links](#)  
[Mirrors](#) | [Updates](#) | [Feedback](#) | [Changes](#) | [Wishlist](#) | [Team](#)

Here are the PuTTY files themselves:

- PuTTY (the Telnet and SSH client itself)
- PSCP (an SCP client, i.e. command-line secure file copy)
- PSFTP (an SFTP client, i.e. general file transfer sessions much like FTP)
- PuTTYtel (a Telnet-only client)
- Plink (a command-line interface to the PuTTY back ends)
- Pageant (an SSH authentication agent for PuTTY, PSCP, PSFTP, and Plink)
- PuTTYgen (an RSA and DSA key generation utility).

**LEGAL WARNING:** Use of PuTTY, PSCP, PSFTP and Plink is illegal in countries where encryption is outlawed. I believe it is legal to use PuTTY, PSCP, PSFTP and Plink in England and Wales and in many other countries, but I am not a lawyer and so if in doubt you should seek legal advice before downloading it. You may find [this site](#) useful (it's a survey of cryptography laws in many countries) but I can't vouch for its correctness.

Use of the Telnet-only binary (PuTTYtel) is unrestricted by any cryptography laws.

There are cryptographic signatures available for all the files we offer below. We also supply cryptographically signed lists of checksums. To download our public keys and find out more about our signature policy, visit the [Keys page](#). If you need a Windows program to compute MD5 checksums, you could try the one at [this site](#). (This MD5 program is also cryptographically signed by its author.)

### Binaries

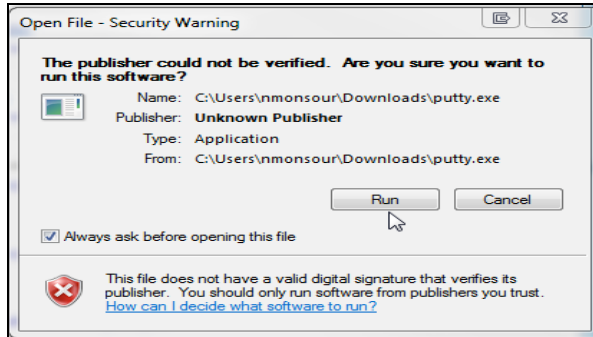
*The latest release version (beta 0.63).* This will generally be a version I think is reasonably likely to work well. If you have a problem with the release version, it might be worth trying out the latest development snapshot (below) to see if I've already fixed the bug, before reporting it to me.

**For Windows on Intel x86**

PuTTY: [putty.exe](#) [\(or by FTP\)](#) [\(RSA sig\)](#) [\(DSA sig\)](#)

2. Select the listed 'PuTTY: putty.exe' file and download it.

3. Run the Putty installer.

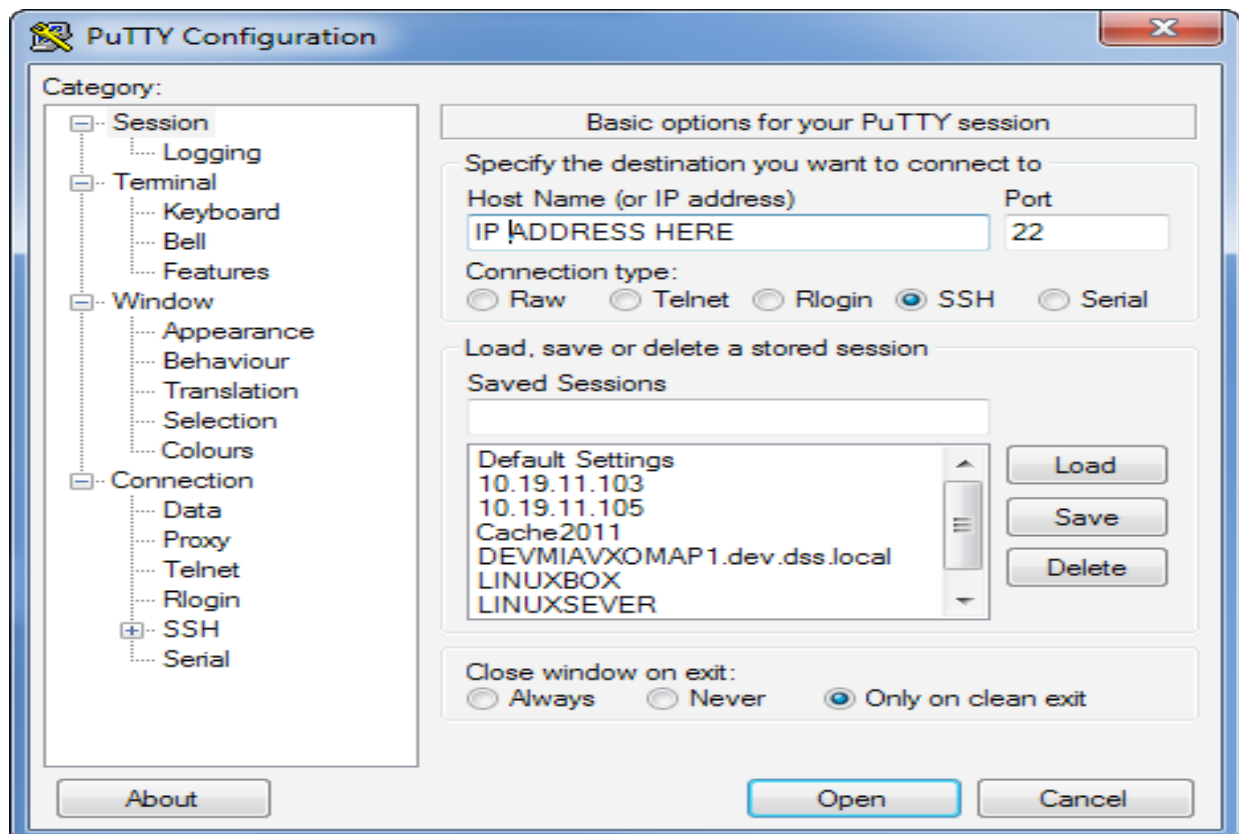


4. Input the correct IP Address. Should be IP Address of the Linux Server.

5. Click the 'SSH' radio button.

6. Add the name for the connection 'V13'.

7. Click 'Save' and it will remain beyond this session for convenient reuse in the future.

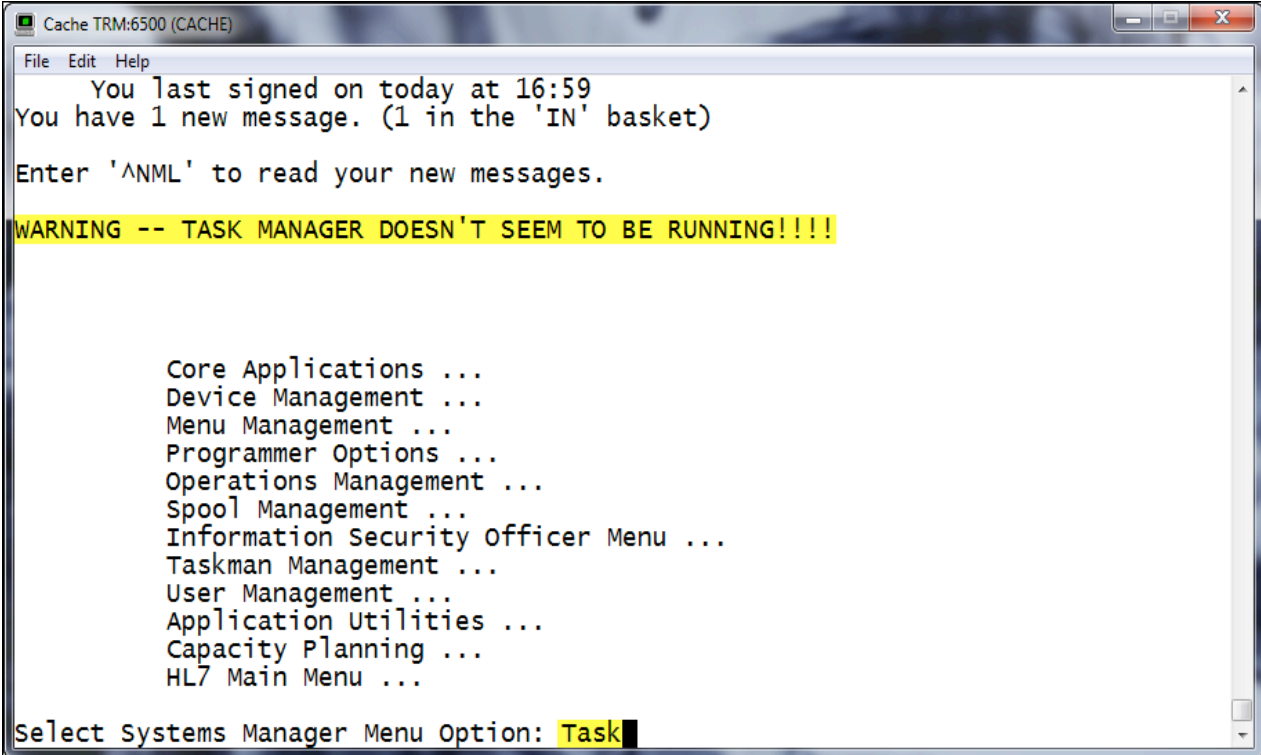


8. Click the 'Open' button to test the connection. If successful a terminal window to the 'V13' environment will display.

## Starting Taskman and the Listener

**NOTE** The steps can be performed in windows via putty or the Linux server via terminal.

1. Open Terminal and type 'csession cache' to enter Cache Terminal.
2. At the 'ACCESS CODE:' prompt type 'ADMIN1'. Press [Enter].
3. At the 'VERIFY CODE:' prompt type '123Admin!!'. Press [Enter].
4. The 'Systems Manager Menu' is displayed. A quick check to determine if the Taskman is not running is via a system message above the Menu options.



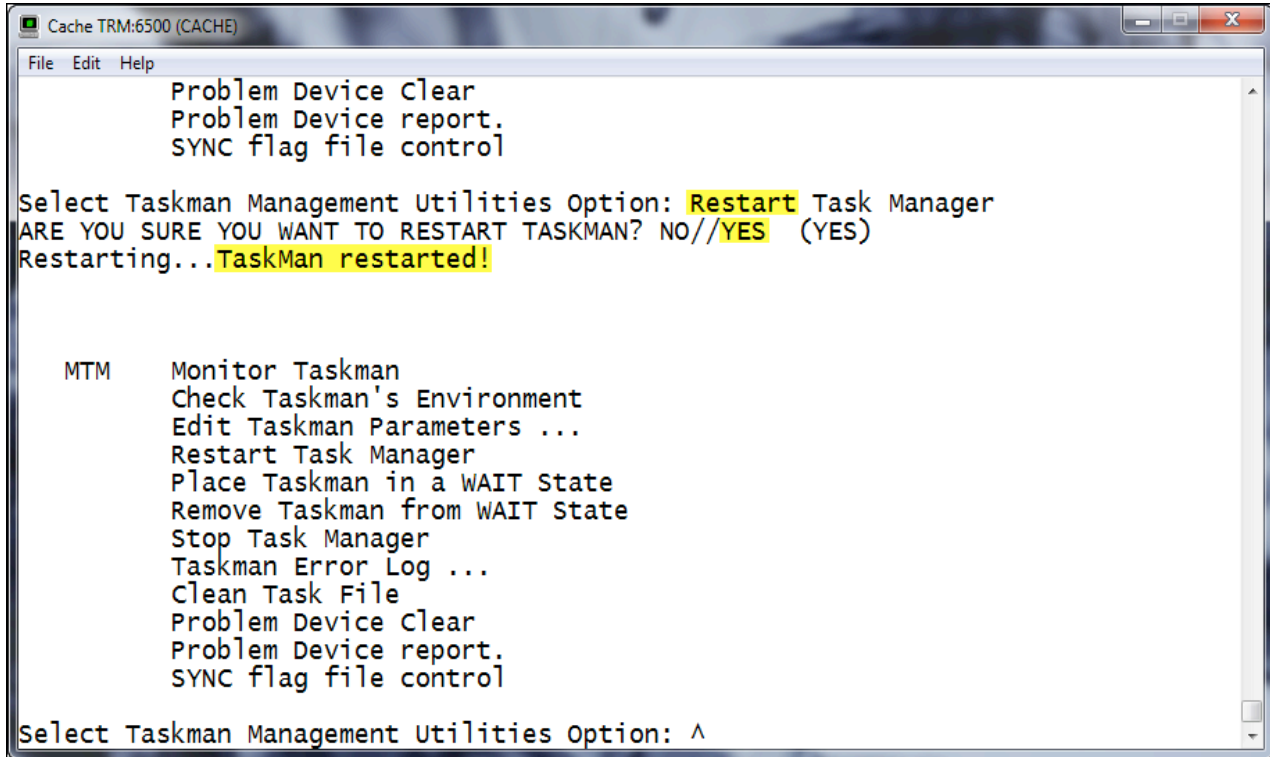
```
Cache TRM:6500 (CACHE)
File Edit Help
You last signed on today at 16:59
You have 1 new message. (1 in the 'IN' basket)
Enter '^NML' to read your new messages.
WARNING -- TASK MANAGER DOESN'T SEEM TO BE RUNNING!!!!

Core Applications ...
Device Management ...
Menu Management ...
Programmer Options ...
Operations Management ...
Spool Management ...
Information Security Officer Menu ...
Taskman Management ...
User Management ...
Application Utilities ...
Capacity Planning ...
HL7 Main Menu ...

Select Systems Manager Menu Option: Task
```

5. Type 'Task' at the 'Select Systems Manager Menu Option:' prompt and press [Enter] to enter 'Taskman Management'.
6. Type 'Task' at the 'Select Taskman Management Option:' prompt and press [Enter] to enter 'Taskman Management Utilities'.

7. Type 'Restart' at the 'Select Taskman Management Utilities Option:' prompt and press [Enter] to restart Taskman. Type 'YES' and press [Enter] as highlighted below.



```
Cache TRM:6500 (CACHE)
File Edit Help

Problem Device Clear
Problem Device report.
SYNC flag file control

Select Taskman Management Utilities Option: Restart Task Manager
ARE YOU SURE YOU WANT TO RESTART TASKMAN? NO//YES (YES)
Restarting...TaskMan restarted!

MTM Monitor Taskman
Check Taskman's Environment
Edit Taskman Parameters ...
Restart Task Manager
Place Taskman in a WAIT State
Remove Taskman from WAIT State
Stop Task Manager
Taskman Error Log ...
Clean Task File
Problem Device Clear
Problem Device report.
SYNC flag file control

Select Taskman Management Utilities Option: ^
```

8. Type an '^' at the 'Select Taskman Management Utilities Option:' prompt and press [Enter] to return to the previous menu.
9. Type an '^' at the 'Select Taskman Management Option:' prompt and press [Enter] to return to the main menu.
10. Type 'Oper' at the 'Select Systems Manager Menu Option:' prompt and press [Enter] to enter 'Operations Management'.
11. Type 'RPC' at the 'Select Operations Management Option:' prompt and press [Enter] to enter 'RPC Broker Management Menu'.

12. Type 'Start' at the 'RPC Broker Management Menu Option:' prompt and press [Enter] to start All RPC Broker Listeners.

```

Cache TRM:6500 (CACHE)
File Edit Help

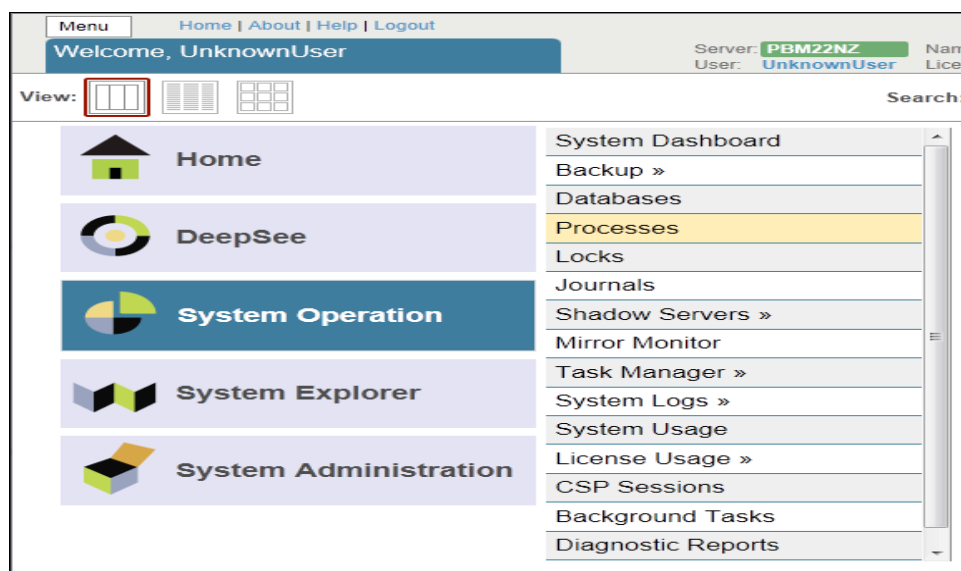
RPC Listener Edit
Start All RPC Broker Listeners
Stop All RPC Broker Listeners
Clear XWB Log Files
Debug Parameter Edit
View XWB Log

Select RPC Broker Management Menu Option: Start All RPC Broker Listeners
Task: RPC Broker Listener STOP on V13-V13:CACHE, port 9999
has been queued as task 238232
Task: RPC Broker Listener START on V13-V13:CACHE, port 9999
has been queued as task 238235

RPC Listener Edit
Start All RPC Broker Listeners
Stop All RPC Broker Listeners
Clear XWB Log Files
Debug Parameter Edit
View XWB Log

Select RPC Broker Management Menu Option:
  
```

13. Navigate the Management Portal.  
- [http://\[server ip address\]:\[WebServerPort\]/csp/sys/UtilHome.csp](http://[server ip address]:[WebServerPort]/csp/sys/UtilHome.csp)
14. Select 'System Operation>Processes' to view currently running processes.





- To verify Taskman and the Listener have started, look next to your Namespace for '%ZTM' for Taskman and '%ZISTCPS', along with the port, for the Listener. Taskman and the Listener may take up to 90 seconds to upload, so use the 'Refresh' button to reload processes periodically.

Menu
Home | About | Help | Logout
System > Processes

Processes

Server: PBM22NZ
Namespace: %SYS
User: UnknownUser
Licensed to: Document Storage Systems, Inc.
Instance: CACHE
Cache by InterSystems

Broadcast
Refresh: ☐ off ☒ on 10 sec
Processes

The following is a list of active processes:

Filter:
Page size: 0
Max rows: 1000
Results: 24
Page: 1 of 1

Process ID	User	Device	Namespace	Routine	Commands	Globals	State	Client Name	Client EXE	Client IP	O/S Username	
4144				CONTROL	0	0	RUNW				SYSTEM	-
4772				WRTDMN	197	1047	RUNW				SYSTEM	-
4780				GARCOL	0	0	RUNW				SYSTEM	-
4788				JRNDMN	1599	0	RUNW				SYSTEM	-
4796				EXPDMN	0	0	RUNW				SYSTEM	-
8544	UnknownUser	[TCP]1972 8544	%SYS	%SYS.cspServer2	311865	30028	READ		CSPap.dll		CSP Gateway	<a href="#">Details</a>
2012		\\.nul	%SYS	MONITOR	11985	69	EVTW				SYSTEM	-
4412		\\.nul	%SYS	RECEIVE	5355	289	HANGW				SYSTEM	<a href="#">Details</a>
2072		\\.nul	%SYS	ECPWork	0	0	RUNW				SYSTEM	<a href="#">Details</a>
5004		\\.nul	%SYS	CLNDMN	255	21	RUNW				SYSTEM	-
1492		[TCP]1972	%SYS	%SYS.SERVER	255	49	READ				SYSTEM	-
8600	UnknownUser	localhost:1972	%SYS	%SYS.ProcessQuery.1	540906	34817	RUN	localhost	CSPap.dll	::1	CSP Gateway	-
4696		\\.nul	%SYS	LMFMON	5865	69	HANGW				SYSTEM	-
6500	UnknownUser	[TRM] 6500	V13	XQ	29835	2535	READ	TRM:		127.0.0.1	bhatten	<a href="#">Details</a>
8620	UnknownUser	localhost:1972	%SYS	%SYS.cspServer2	14280	443	READ	localhost	CSPap.dll	::1	CSP Gateway	<a href="#">Details</a>
4444		\\.nul	%SYS	%CSP.Daemon.1	6885	804	HANGW				SYSTEM	-
3148		\\.nul	%SYS	%SYS.Monitor.Control.1	609705	16308	EVTW				SYSTEM	-
1172	TASKMGR	\\.nul	%SYS	%SYS.TaskSuper.1	18870	1540	EVTW				SYSTEM	<a href="#">Details</a>
4400	UnknownUser	\\.nul	V13	%ZTMS1	241740	24894	HANGW				bhatten	<a href="#">Details</a>
8232	UnknownUser	\\.nul	V13	%ZTM	1020	101	LOCK				bhatten	<a href="#">Details</a>
6228	UnknownUser	\\.nul	V13	%ZTM	124440	18358	HANGW				bhatten	<a href="#">Details</a>
1112	UnknownUser	\\.nul	V13	XMKPLQ	17085	1973	HANGW				bhatten	<a href="#">Details</a>
1436	UnknownUser	\\.nul	V13	XMTDT	12240	789	HANGW				bhatten	<a href="#">Details</a>
7248	UnknownUser	[TCP]9999	V13	%ZISTCPS	19125	1635	READ				bhatten	<a href="#">Details</a>

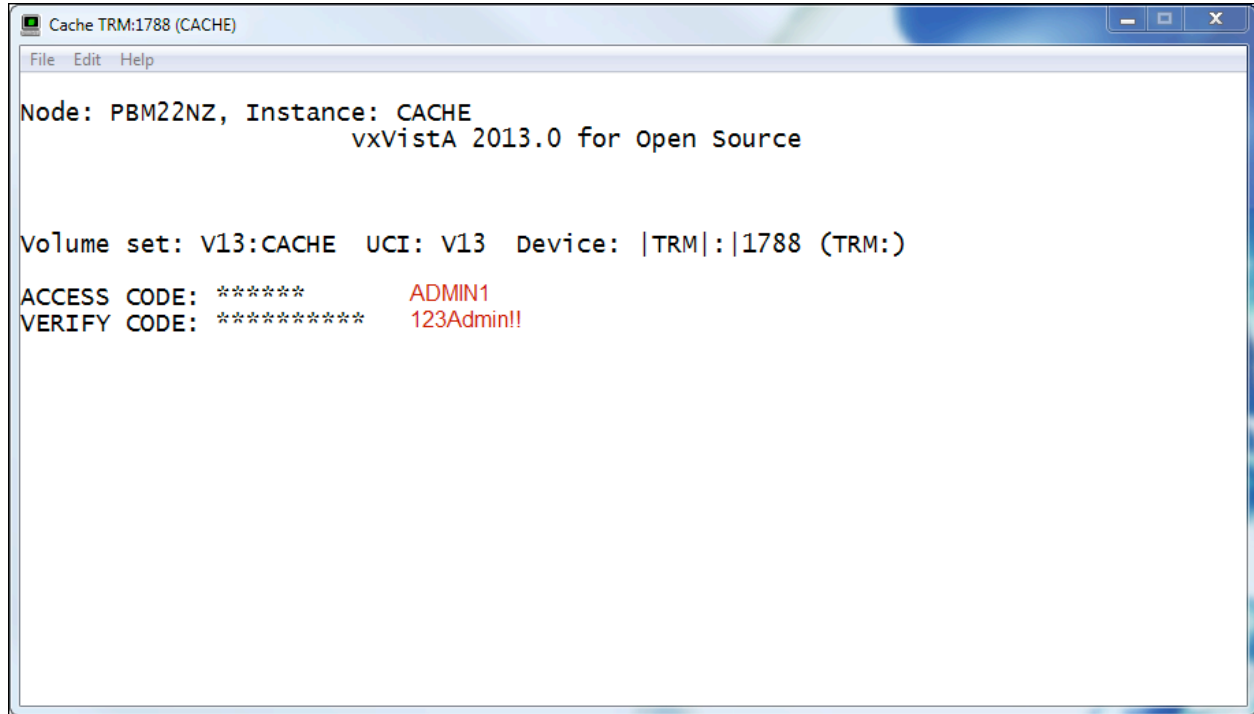
- Upon verification, close the Terminal and Management Portal.

## New User Configuration

Use this section in conjunction with Appendix B to grant the user any security keys/secondary menu options needed.

### *Creating a New User via Cloning*

1. Open Terminal Window. System->Terminal.
2. To enter the Cache Terminal type 'cache' or "csession CACHE".
3. Follow the Exact terminal notes below.



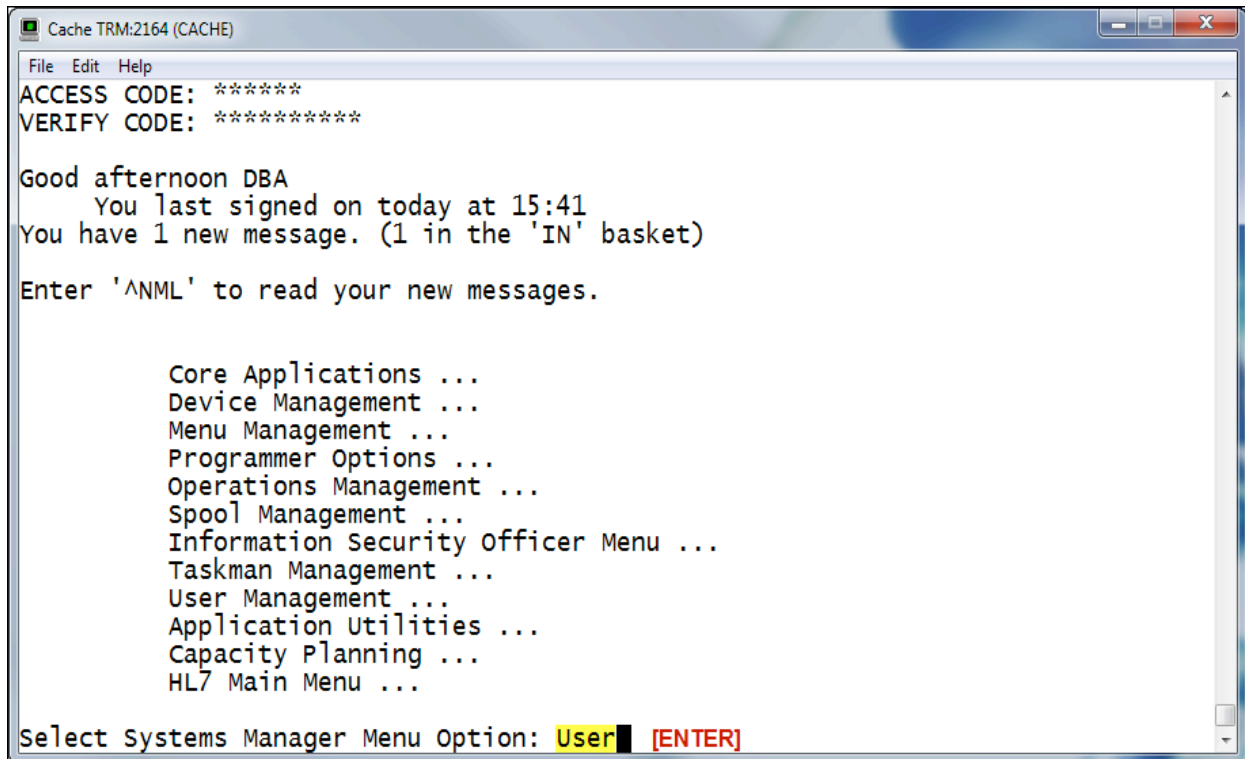
```
Cache TRM:1788 (CACHE)
File Edit Help

Node: PBM22NZ, Instance: CACHE
                        vxVista 2013.0 for Open Source

Volume set: V13:CACHE  UCI: V13  Device: |TRM|:|1788 (TRM:)

ACCESS CODE: *****      ADMIN1
VERIFY CODE: *****      123Admin!!
```

## 4. Systems Manager Menu



```
Cache TRM:2164 (CACHE)
File Edit Help
ACCESS CODE: *****
VERIFY CODE: *****

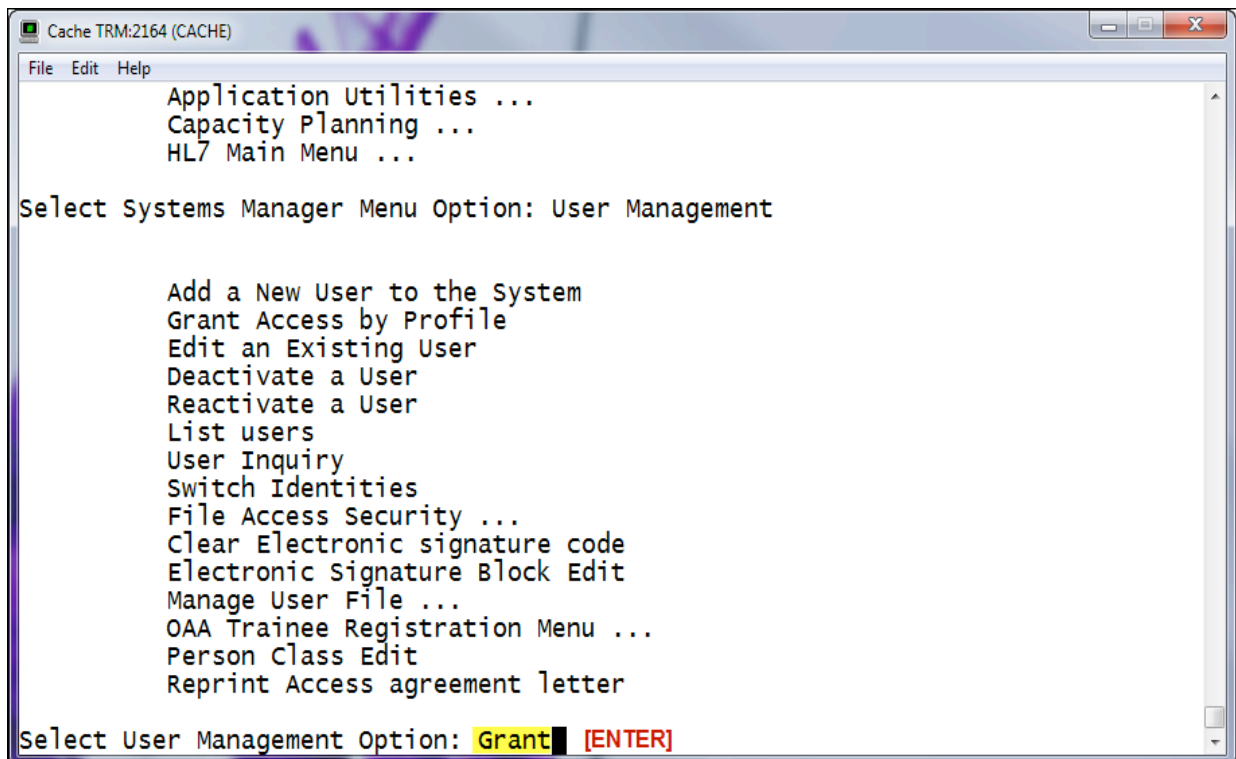
Good afternoon DBA
  You last signed on today at 15:41
You have 1 new message. (1 in the 'IN' basket)

Enter 'ANML' to read your new messages.

Core Applications ...
Device Management ...
Menu Management ...
Programmer Options ...
Operations Management ...
Spool Management ...
Information Security Officer Menu ...
Taskman Management ...
User Management ...
Application Utilities ...
Capacity Planning ...
HL7 Main Menu ...

Select Systems Manager Menu Option: User [ENTER]
```

## 5. User Management



```
Cache TRM:2164 (CACHE)
File Edit Help
Application Utilities ...
Capacity Planning ...
HL7 Main Menu ...

Select Systems Manager Menu Option: User Management

Add a New User to the System
Grant Access by Profile
Edit an Existing User
Deactivate a User
Reactivate a User
List users
User Inquiry
Switch Identities
File Access Security ...
Clear Electronic signature code
Electronic Signature Block Edit
Manage User File ...
OAA Trainee Registration Menu ...
Person Class Edit
Reprint Access agreement letter

Select User Management Option: Grant [ENTER]
```

## 6. Batch Entry of New Persons

Cache TRM:2164 (CACHE)

File Edit Help

**Batch Entry of New Persons**  
-----

Please select a person to copy from

Template PERSON: **zztest** [ENTER] ← Any current PERSON can be used as a Template.  
For proper Application setup, a non-adminstrative  
PERSON type is necessary.

1	ZZTEST,DOCTOR	DZ
2	ZZTEST,NURSE	NZ

CHOOSE 1-2: **1** [ENTER] ← Selected '1' for ZZTEST,DOCTOR

7. PERSON information is printed to terminal

```
Cache TRM:2164 (CACHE)
File Edit Help
SSN: 800000008
LAST SIGN-ON DATE/TIME: SEP 14, 2009@11:52:19
XUS Logon Attempt Count: 0          XUS Active User: No
Entry Last Edit Date: SEP 10, 2009  TERMINAL TYPE LAST USED: C-VT320
DIVISION: VXVISTA.ORG
NAME COMPONENTS: 200                SERVICE/SECTION: INFORMATION TECHNOLOGY
SIGNATURE BLOCK PRINTED NAME: DOCTOR ZZTEST
KEY: PROVIDER                        GIVEN BY: ADMIN,SYSTEM
DATE GIVEN: AUG 26, 2009
KEY: ORES                            GIVEN BY: ADMIN,SYSTEM
DATE GIVEN: AUG 26, 2009
KEY: OR GN ACCESS                    GIVEN BY: ADMIN,SYSTEM
DATE GIVEN: AUG 26, 2009

Enter RETURN to continue or '^' to exit:
RESTRICT PATIENT SELECTION: NO      AUTO MENU: YES, MENUS GENERATED
TYPE-AHEAD: ALLOWED                 TIMED READ (# OF SECONDS): 999
PRIMARY MENU OPTION: ORZ MAIN MENU CLINICIAN
CPRS TAB: COR                       EFFECTIVE DATE: AUG 24, 2009
AUTHORIZED TO WRITE MED ORDERS: YES
Person Class: Allopathic and Osteopathic Physicians
Effective Date: AUG 01, 2009

Is this the person whose data you want cloned? YES [ENTER]
```

8. Continue to follow highlighted steps

```
Cache TRM:2164 (CACHE)
File Edit Help
PRIMARY MENU OPTION: ORZ MAIN MENU CLINICIAN
CPRS TAB: COR                       EFFECTIVE DATE: AUG 24, 2009
AUTHORIZED TO WRITE MED ORDERS: YES
Person Class: Allopathic and Osteopathic Physicians
Effective Date: AUG 01, 2009

Is this the person whose data you want cloned? YES

You may enter a date, when the users that are being created/updated
will no longer have access to the system.
Enter (optional) TERMINATION DATE:

Batch Entry of New Persons
-----
Clone of: ZZTEST,DOCTOR
Enter NEW PERSON's name (Family,Given Middle suffix): ZZTEST,NEWUSER [ENTER]
Are you adding 'ZZTEST,NEWUSER' as a new NEW PERSON (the 65TH)? No// YES [ENTER]
(Yes)
Checking SOUNDEX for matches.
ZZTEST,NURSE
ZZTEST,DOCTOR
ZDSSSTALLING,FRANK
Do you still want to add this entry: NO//YES [ENTER]
```

Cache TRM:2164 (CACHE)

File Edit Help

ZZTEST,NURSE  
ZZTEST,DOCTOR  
ZDSSSTALLING,FRANK  
Do you still want to add this entry: NO//YES  
Name components.  
FAMILY (LAST) NAME: ZZTEST// [ENTER]  
GIVEN (FIRST) NAME: NEWUSER// [ENTER]  
MIDDLE NAME: [ENTER]  
SUFFIX: [ENTER]  
Now for the Identifiers.  
INITIAL: NZ [ENTER]  
SSN: 800001234?? [ENTER] Oops!  
ANSWER MUST BE 9 CHARACTERS IN LENGTH  
Already used by ZDSSKENTRA,LEN  
SSN: 800012345 [ENTER]  
SEX: M MALE [ENTER]  
NPI: [ENTER]  
Do You Want To Clone PERSON CLASS? NO [ENTER]  
  
Next!  
Enter NEW PERSON's name (Family,Given Middle suffix): [ENTER]  
  
Where do you want to print the COMPUTER ACCOUNT NOTIFICATION LETTERS?  
DEVICE: HOME// ;P-DEC;80;9999 Console (Cache' on windows) [ENTER]

Adjust 'Name components' and 'Identifiers' as necessary.

At 'Enter NEW PERSON's name...' prompt, another User can be entered following the same steps.

Setting the 'DEVICE:' to ;P-DEC;80;9999 allows the following pages to print to screen in a continuous flow

9. After the 'COMPUTER ACCOUNT NOTIFICATION LETTERS' have printed to screen, you will be returned to the 'User Management' menu.

Cache TRM:8464 (CACHE)

File Edit Help

Add a New User to the System  
Grant Access by Profile  
Edit an Existing User  
Deactivate a User  
Reactivate a User  
List users  
User Inquiry  
Switch Identities  
File Access Security ...  
Clear Electronic signature code  
Electronic Signature Block Edit  
Manage User File ...  
OAA Trainee Registration Menu ...  
Person Class Edit  
Reprint Access agreement letter

Select User Management Option: Edit an Existing User [ENTER]  
Select NEW PERSON NAME: zztest [ENTER]  
1 ZZTEST,DOCTOR DZ  
2 ZZTEST,NEWUSER NZ  
3 ZZTEST,NURSE NZ  
CHOOSE 1-3: 2 [ENTER]

10. 'Edit an Existing User' to setup the User's ACCESS & VERIFY CODES. Use 'Arrow' keys to navigate to appropriate blocks.

Cache TRM:8464 (CACHE)

File Edit Help

Page 1 of 5

NAME: ZZTEST,NEWUSER

NAME... ZZTEST,NEWUSER INITIAL: NZ  
TITLE: NICK NAME:  
SSN: 800012345 DOB:  
DEGREE: MAIL CODE:  
DISUSER: TERMINATION DATE:  
Termination Reason:

PRIMARY MENU OPTION: ORZ MAIN MENU CLINICIAN  
Select SECONDARY MENU OPTIONS:  
Want to edit ACCESS CODE (Y/N): Y FILE MANAGER ACCESS CODE:  
Want to edit VERIFY CODE (Y/N): [ENTER]

Select DIVISION: VXVISTA.ORG  
SERVICE/SECTION: INFORMATION TECHNOLOGY

Enter a new ACCESS CODE <Hidden>: \*\*\*\*\* [ENTER] retype and press [ENTER] again

Cache TRM:8464 (CACHE)

File Edit Help

Page 1 of 5

NAME: ZZTEST,NEWUSER

NAME... ZZTEST,NEWUSER INITIAL: NZ  
TITLE: NICK NAME:  
SSN: 800012345 DOB:  
DEGREE: MAIL CODE:  
DISUSER: TERMINATION DATE:  
Termination Reason:

PRIMARY MENU OPTION: ORZ MAIN MENU CLINICIAN  
Select SECONDARY MENU OPTIONS:  
Want to edit ACCESS CODE (Y/N): FILE MANAGER ACCESS CODE:  
Want to edit VERIFY CODE (Y/N): Y

Select DIVISION: VXVISTA.ORG  
SERVICE/SECTION: INFORMATION TECHNOLOGY

Enter a new VERIFY CODE: \*\*\*\*\* [ENTER] retype and press [ENTER] again

User will be prompted to change the VERIFY CODE upon first login



11. Use 'Arrow' keys to scroll to bottom of page. Type 'S' then [ENTER] to save. Type 'E' then [ENTER] to exit.

### *Adding Secondary Menu Options and Security Keys*

1. Some vxApps that will be configured later in the installation process require that Users be granted certain Menu options and Security Keys for proper operation.



2. From the 'User Management' menu, use highlighted steps above to enter 'Edit an Existing User'. Follow the steps below to add a required 'Secondary Menu Option'. A full list of required 'Secondary Menu Options' and 'Security Keys' can be found in the Appendix.

Cache TRM:8464 (CACHE)

File Edit Help

Edit an Existing User

NAME: ZZTEST,NEWUSER Page 1 of 5

---

NAME... ZZTEST,NEWUSER INITIAL: NZ  
 TITLE: NICK NAME:  
 SSN: 800012345 DOB:  
 DEGREE: MAIL CODE:  
 DISUSER: TERMINATION DATE:  
 Termination Reason:

PRIMARY MENU OPTION: ORZ MAIN MENU CLINICIAN  
 Select SECONDARY MENU OPTIONS: VFDVX CPRS GUI CHART [ENTER]  
 Want to edit ACCESS CODE (Y/N): FILE MANAGER ACCESS CODE:  
 Want to edit VERIFY CODE (Y/N):

Select DIVISION: VXVISTA.ORG  
 SERVICE/SECTION: INFORMATION TECHNOLOGY

---

vxCPRSChart version 1.28.24.x  
 Are you adding 'VFDVX CPRS GUI CHART' as  
 a new SECONDARY MENU OPTIONS (the 1ST for this NEW PERSON)? No// Y [ENTER]

Cache TRM:8464 (CACHE)

File Edit Help

Edit an Existing User

NAME: ZZTEST,NEWUSER Page 1 of 5

---

NAME... ZZTEST,NEWUSER INITIAL: NZ  
 TITLE: NICK NAME:  
 SSN: 800012345 DOB:  
 DEGREE: MAIL CODE:  
 DISUSER: TERMINATION DATE:  
 Termination Reason:

Select SECONDARY MENU OPTIONS  
 Want to SECONDARY MENU OPTIONS: VFDVX CPRS GUI CHART [ENTER]  
 Want to SYNONYM: [ENTER]

---

Close Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: Close [ENTER] Press <PF1>H for help Insert

3. Use 'Arrow' keys to scroll to bottom of page. Type 'S' then [ENTER] to save. Type 'E' then [ENTER] to exit.

Cache TRM:8464 (CACHE)

File Edit Help

Edit an Existing User

NAME: ZZTEST,NEWUSER Page 1 of 5

---

NAME... ZZTEST,NEWUSER INITIAL: NZ  
 TITLE: NICK NAME:  
 SSN: 800012345 DOB:  
 DEGREE: MAIL CODE:  
 DISUSER: TERMINATION DATE:  
 Termination Reason:

PRIMARY MENU OPTION: ORZ MAIN MENU CLINICIAN  
 Select SECONDARY MENU OPTIONS:  
 Want to edit ACCESS CODE (Y/N): FILE MANAGER ACCESS CODE:  
 Want to edit VERIFY CODE (Y/N):

Select DIVISION: VXVISTA.ORG  
 SERVICE/SECTION: INFORMATION TECHNOLOGY

---

Exit Save Next Page Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: S [ENTER] Press <PF1>H for help Insert

4. From the 'User Management' menu, type '^' to return to the 'Systems Management Menu'. Typing '^' at most prompts throughout the terminal will return the user to the previous option.

Cache TRM:10020 (CACHE)

File Edit Help

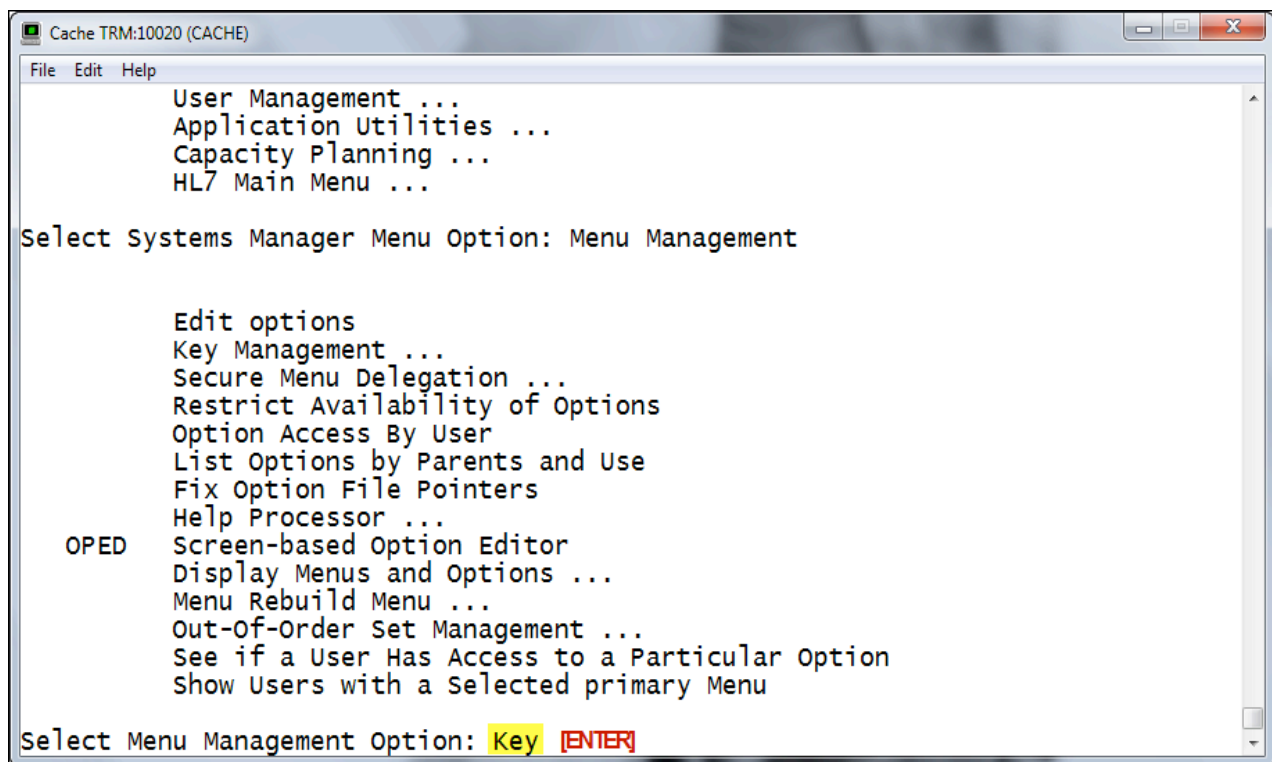
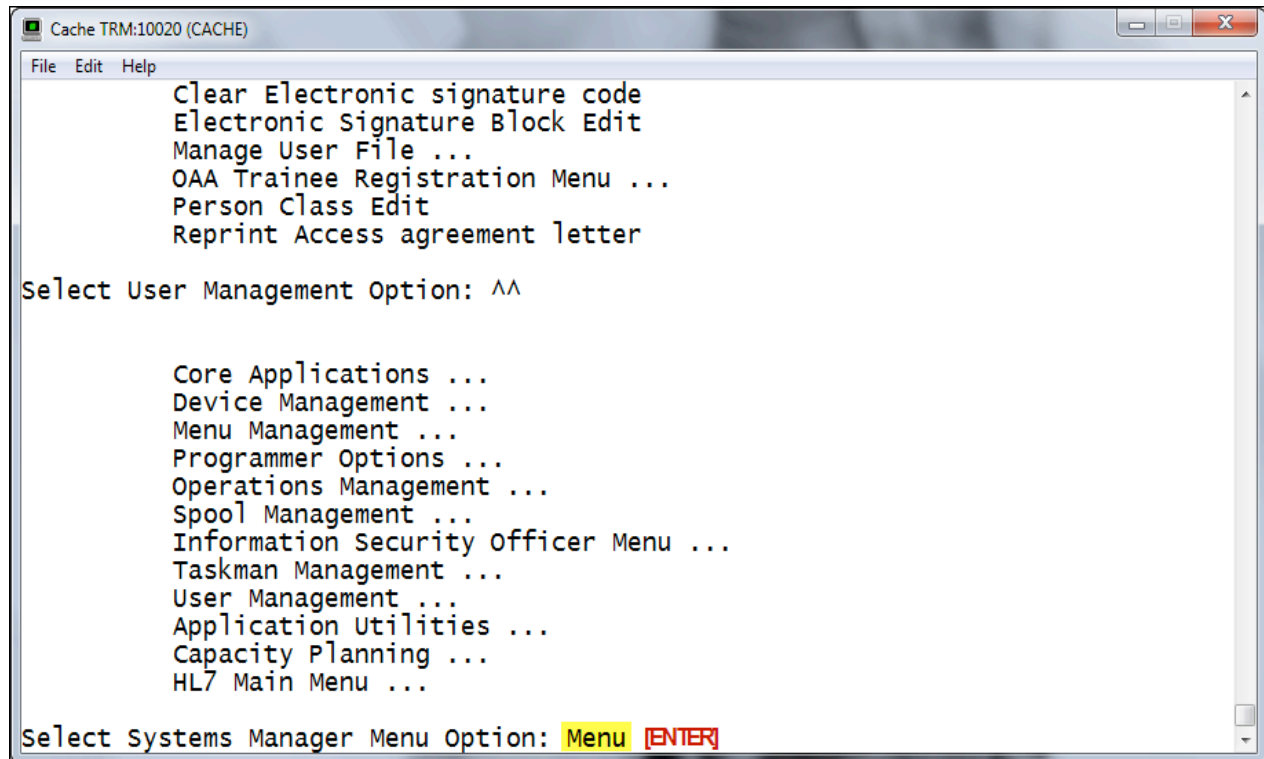
Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: e Press <PF1>H for help Insert

Add a New User to the System  
 Grant Access by Profile  
 Edit an Existing User  
 Deactivate a User  
 Reactivate a User  
 List users  
 User Inquiry  
 Switch Identities  
 File Access Security ...  
 Clear Electronic signature code  
 Electronic Signature Block Edit  
 Manage User File ...  
 OAA Trainee Registration Menu ...  
 Person Class Edit  
 Reprint Access agreement letter

Select User Management Option: ^ [ENTER]

5. Follow the steps below to add a required 'Security Key'.



```
Cache TRM:10020 (CACHE)
File Edit Help
OPED  Fix Option File Pointers
      Help Processor ...
      Screen-based Option Editor
      Display Menus and Options ...
      Menu Rebuild Menu ...
      Out-Of-Order Set Management ...
      See if a User Has Access to a Particular Option
      Show Users with a Selected primary Menu

Select Menu Management Option: Key Management

      Allocation of Security Keys
      De-allocation of Security Keys
      Enter/Edit of Security Keys
      All the Keys a User Needs
      Change user's allocated keys to delegated keys
      Delegate keys
      Keys For a Given Menu Tree
      List users holding a certain key
      Remove delegated keys
      Show the keys of a particular user

Select Key Management Option: Alloc [ENTER]
```

6. Type the name of the security key required at the 'Allocate key:' prompt. Multiple keys can be entered prior to assignment. Required Security Keys can be found in the Appendix.

```
Cache TRM:5324 (CACHE)
File Edit Help
Select Key Management Option: Allocation of Security Keys
Allocate key: OR GN ACCESS [ENTER]
Another key: [ENTER]
Holder of key: zztest,new ZZTEST,NEWUSER      NZ [ENTER]
Another holder: [ENTER]
You've selected the following keys:             Multiple keys can be assigned to multiple users
                                                simultaneously.
OR GN ACCESS
You've selected the following holders:           'OR GN ACCESS' and 'zztest,new' are shown
                                                only as examples.
ZZTEST,NEWUSER
You are allocating keys. Do you wish to proceed? YES// [ENTER]
OR GN ACCESS being assigned to:
ZZTEST,NEWUSER      Person already holds key - no action taken
```

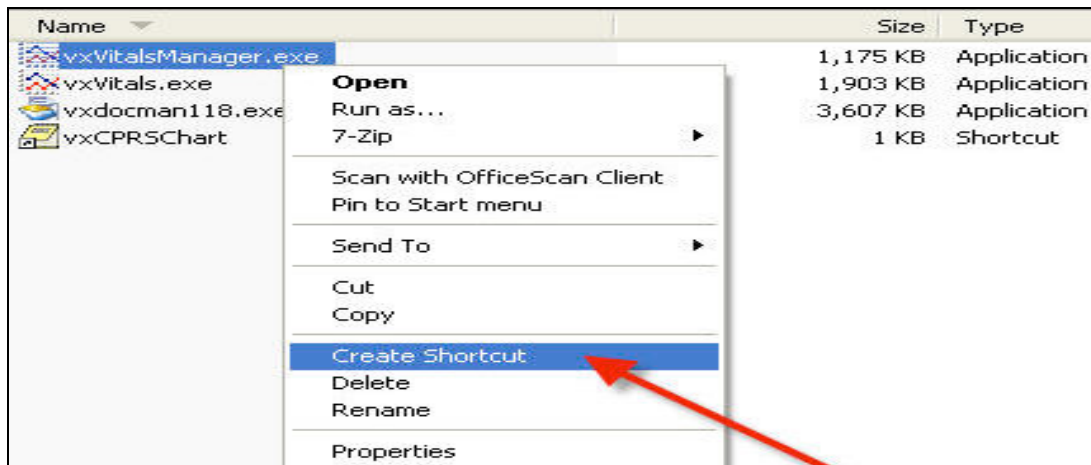
7. After assigning the appropriate Menu Options and Keys, close the terminal.

## Configuring Shortcuts and Settings

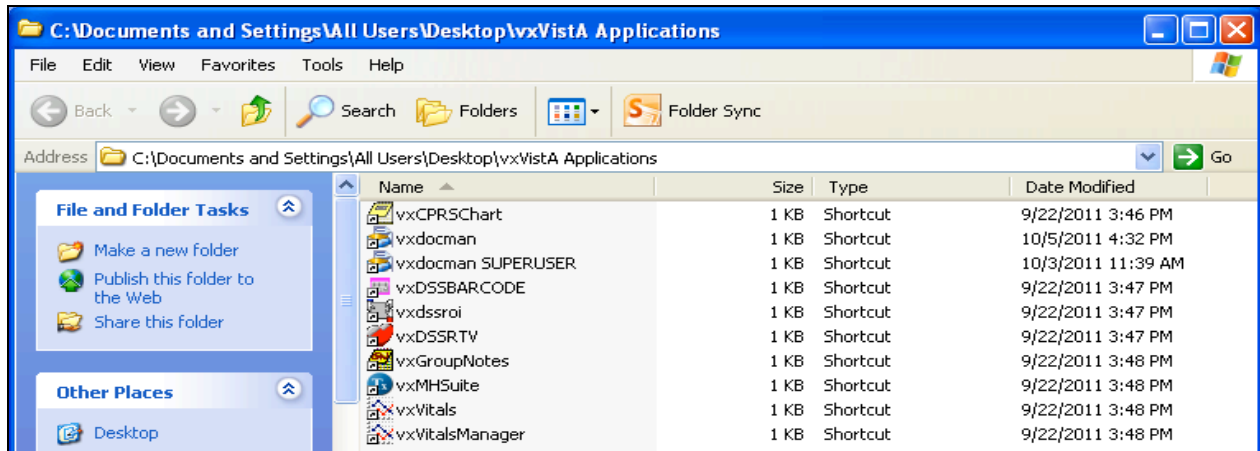
**Note:**

The steps in this section will need to be completed on a windows computer that is connected via a network to the Linux machine.

- Create a folder called “vxVistaServer”. All vxVista applications will be located here.
- Create a folder to place all of the vxVista applications in named ‘vxVista Applications’.
- Unzip the file previously mentioned ‘vxVista.Org’.
- Copy contents of folder EXE-DLL into vxVistaServer folder.
- Open Windows Explorer and Navigate to [\\'computername'\vxVistaServer\](#)
  - a. ‘computername’ should be replaced with your Linux server’s name or IP address.
- Create shortcuts from all the existing files from the application programs folder as shown below:
  - \'computername'\vxVistaServer\vxCPRSChart\vxCPRSChart
  - \'computername'\vxVistaServer\vxBCMA\vxBCMA
  - \'computername'\vxVistaServer\vxBCMAPar\vxBCMAPar
  - \'computername'\vxVistaServer\vxGroupNotes\vxGroupNotes
  - \'computername'\vxVistaServer\vxVitals\vxVitals
  - \'computername'\vxVistaServer\vxVitals\vxVitalsManager
- To create a short cut, right click on the .exe files shown in the paths above and select ‘Create Shortcut’ option. A shortcut will instantly appear in the same location as the .exe file.

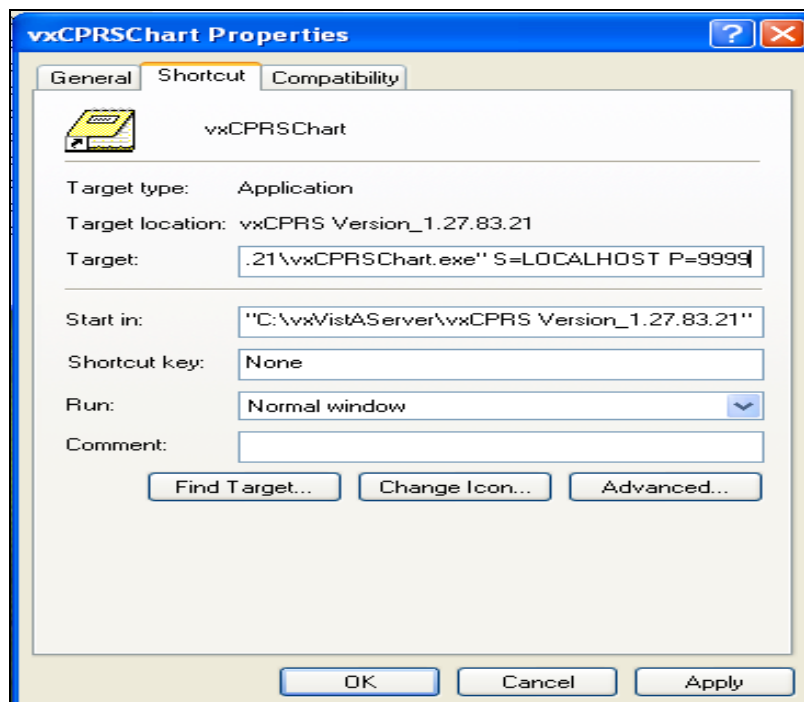


- Move these newly created shortcuts to the 'vxVistA Applications' (commonly placed on the desktop for easy access).

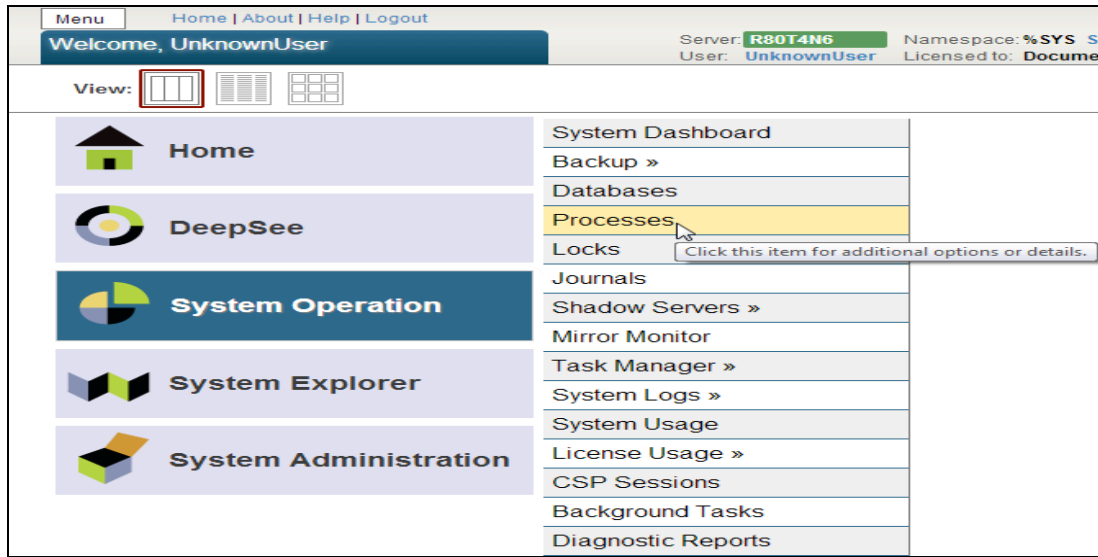


- Right click on each of the shortcut icons and select 'properties'.
- Click the 'Shortcut' tab and update the 'Target:' settings by adding the S & P parameter values for the Cache server.

'[SPACE]S=[server name here][SPACE]P=[Port Number Here]'



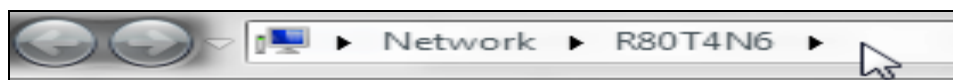
- 'S=' this is the server name or IP Address.
- 'P=' the port used by the namespace instance and was displayed in during the FOIZ process or can be found by following the image below to the Processes section on the Management Portal.



- c. Click twice on the Namespace heading to sort the list and identify the |TCP| entry. The port is the string of numbers immediately following it.

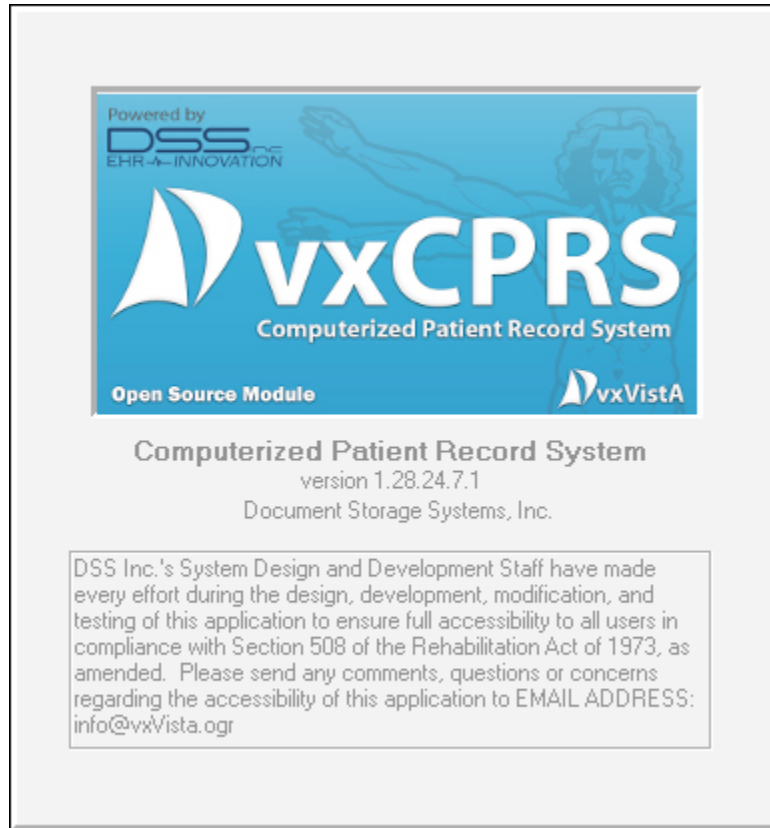
Process ID	User	Device	Namespace	Routine	Commands	Globals	State	Client Name	Client EXE	Client IP	O/S Username
7212	UnknownUser	//./lul	V13	%ZTMS1		58550	5902 HANGW				nmmonsour
7384	UnknownUser	//./lul	V13	%XMKPLQ		16830	1712 HANGW				nmmonsour
1532	UnknownUser	//./lul	V13	%ZSTCPS	2933775	637749	READ			127.0.0.1	nmmonsour
11108	UnknownUser	//./lul	V13	%XMTDT		17340	1330 HANGW				nmmonsour
6052	UnknownUser	//./lul	V13	%ZTM		11985	1894 HANGW				nmmonsour
9916	UnknownUser	//./lul	V13	shell		28560	2374 READ	TRM:			nmmonsour

- Click **Apply** to apply settings and click **OK** to exit.
10. Ensure that the S= parameter is set to the hostname or IP address of the server running Cache
    - a. Create the shortcuts while navigating to the applications from a fully qualified pathed folder, not a folder opened locally(i.e. the image above the 'Start in:' would need to reflect the fully qualified path not the local drive letter, simply updating this to the path is not a best practice).





11. When launching vxCPRS application exe file you will be prompted for an Access Code and Verify code:
  - a. ACCESS CODE: 'ADMIN1'
  - b. VERIFY CODE: '123Admin!!' (case-sensitive)
  - c. Press enter to continue.

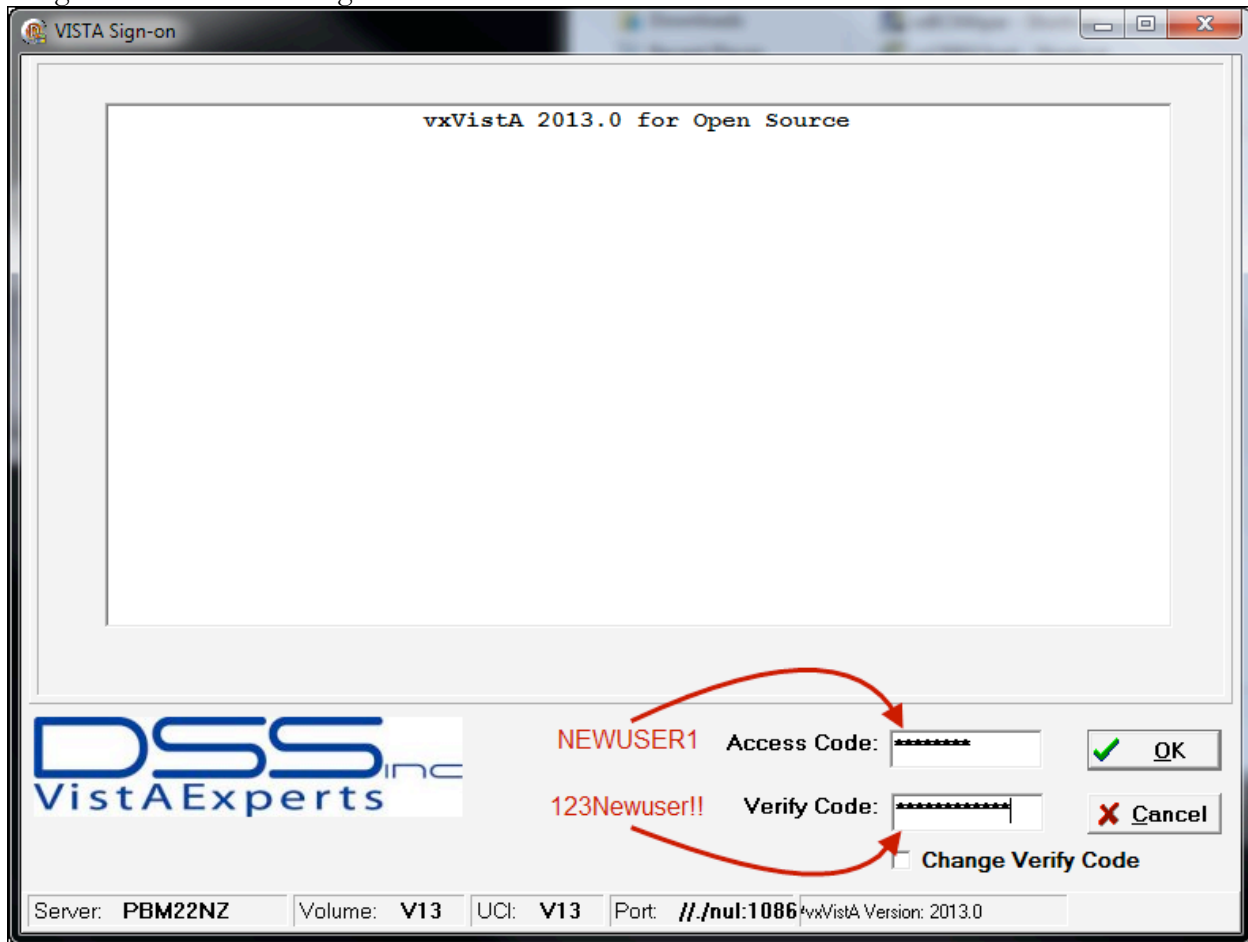




### Setup of vxPatient Picture

Some additional steps are required after 'Configuring Shortcuts and Settings' to ensure that vxPatientPicture works properly. They are as follows:

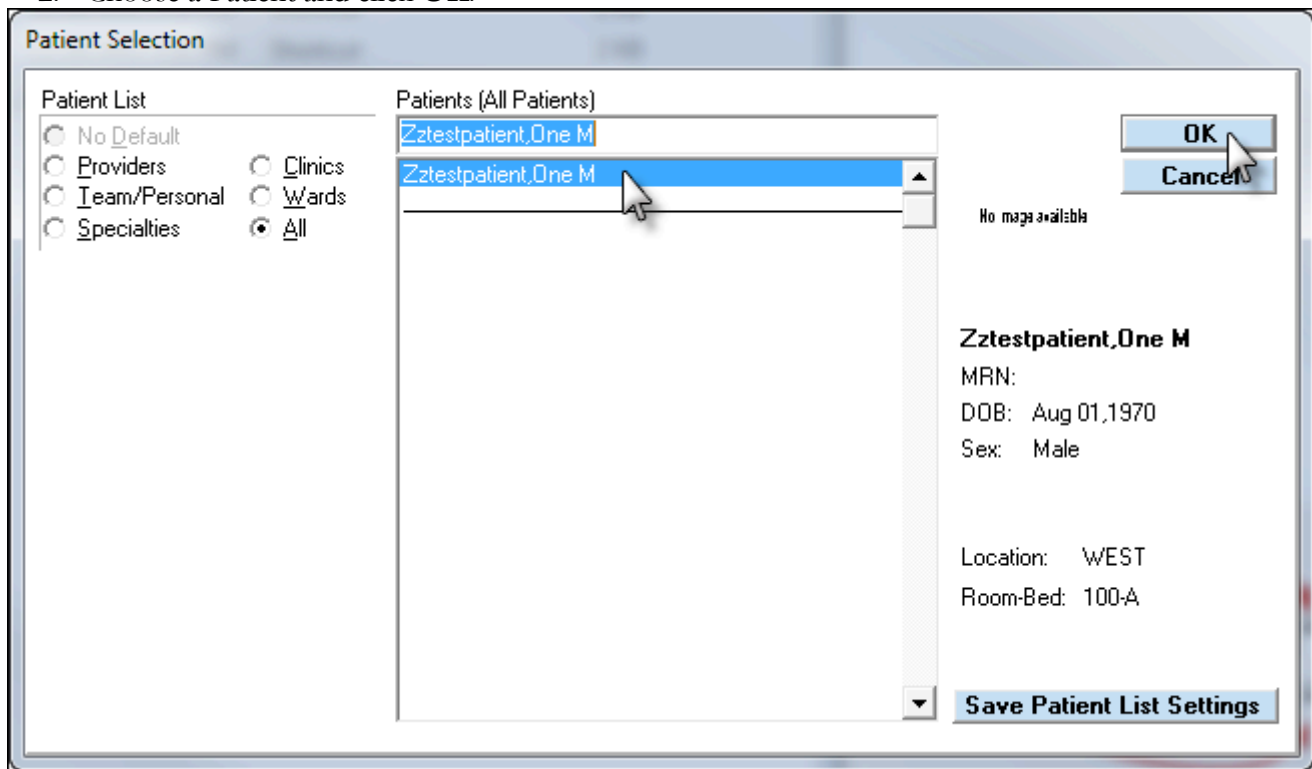
1. Double click the shortcut for 'vxPatientPicture' located in the 'vxVista Applications' folder created earlier. Upon first-run of vxPatientPicture, use the Access/Verify Code pair of a User with Administrative privileges. The 'Standard' user shown at the beginning of this document has been given Administrative rights to vxPatientPicture for convenience.



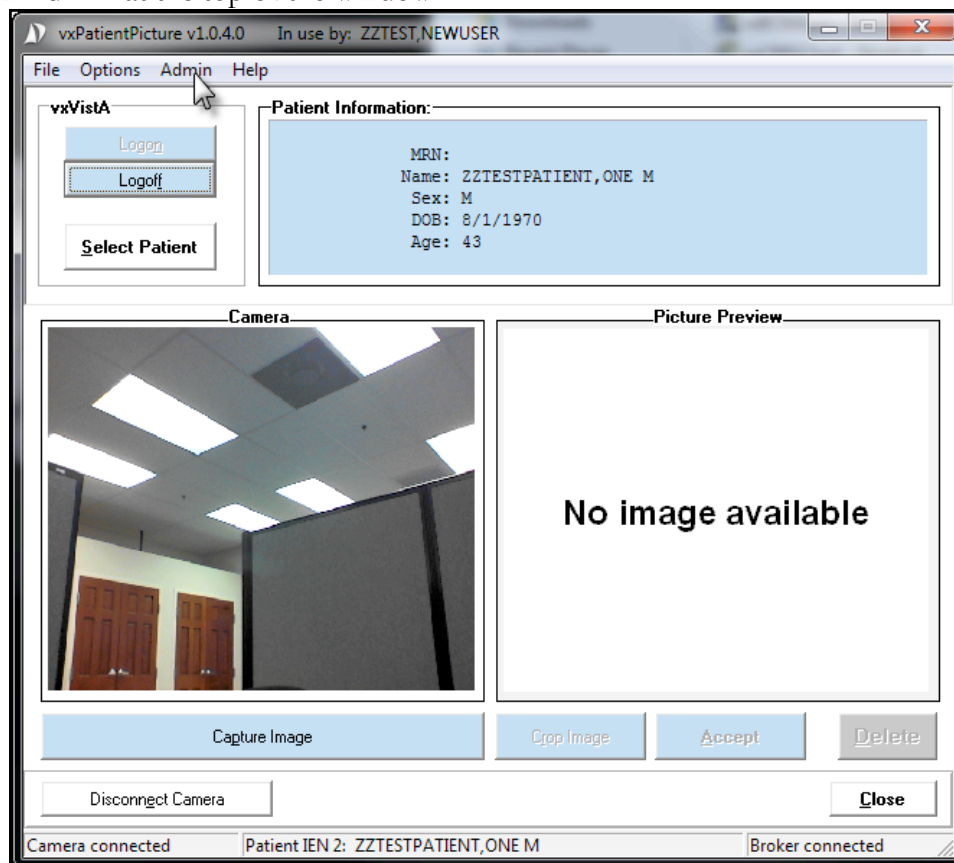
**Note:**

The 'Administrative' user's Access/Verify Code pair provided at the beginning of this document should not be used in vxPatientPicture, as some of its privileges can cause unintended effects.

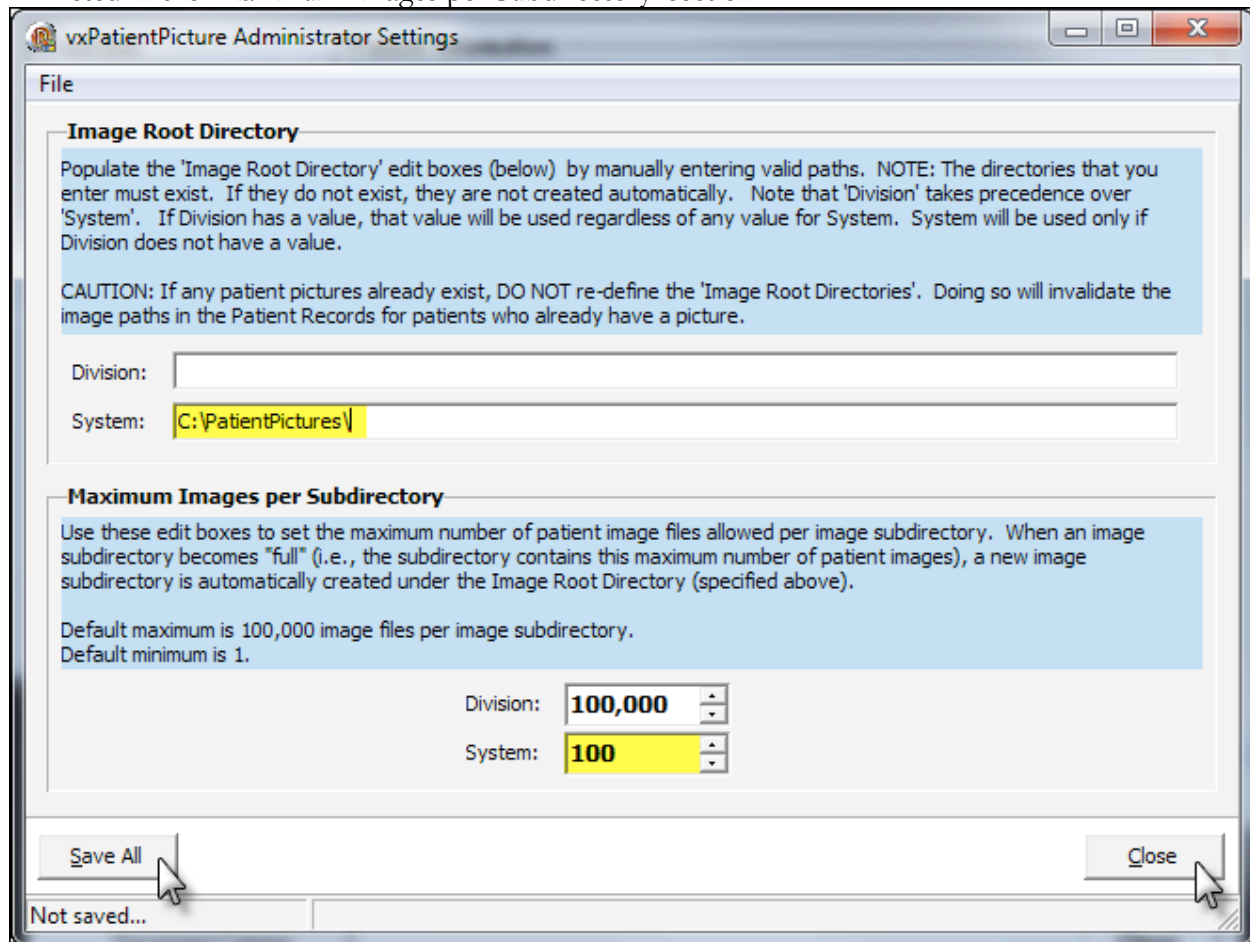
2. Choose a Patient and click **OK**.



3. Click on **Admin** at the top of the window.



4. Type the path for the folder in the 'System:' textbox where images created by vxPatientPicture will be stored. Subfolders will be automatically created upon initialization and according to the values listed in the 'Maximum Images per Subdirectory' section.

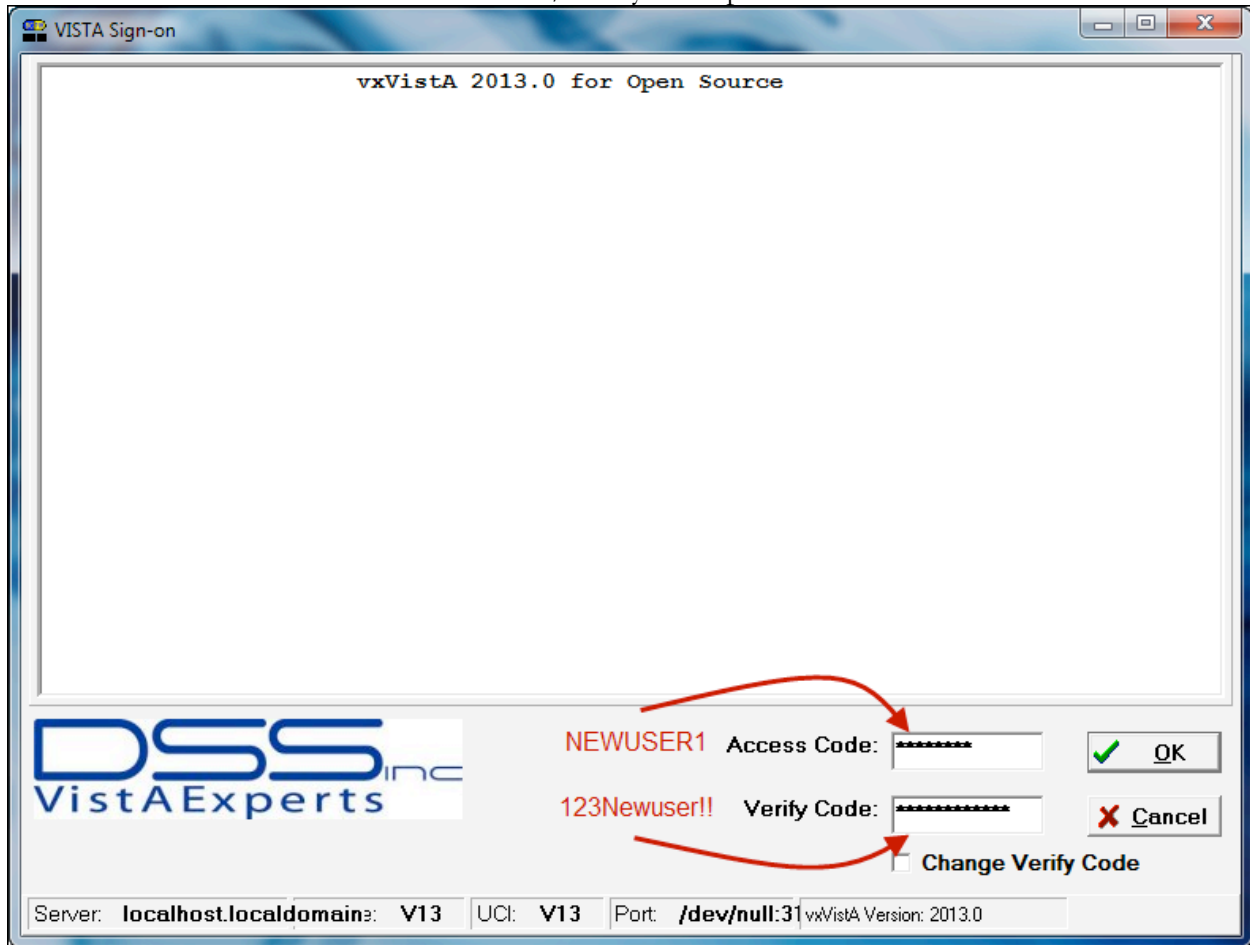


5. Click **Save All** and then **Close**. vxPatientPicture is now configured for use.

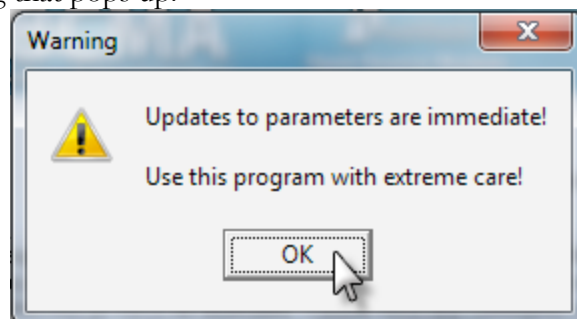
## Setup of vxBCMA

Some additional steps are required after 'Configuring Shortcuts and Settings' to ensure that vxBCMA works properly. They are as follows:

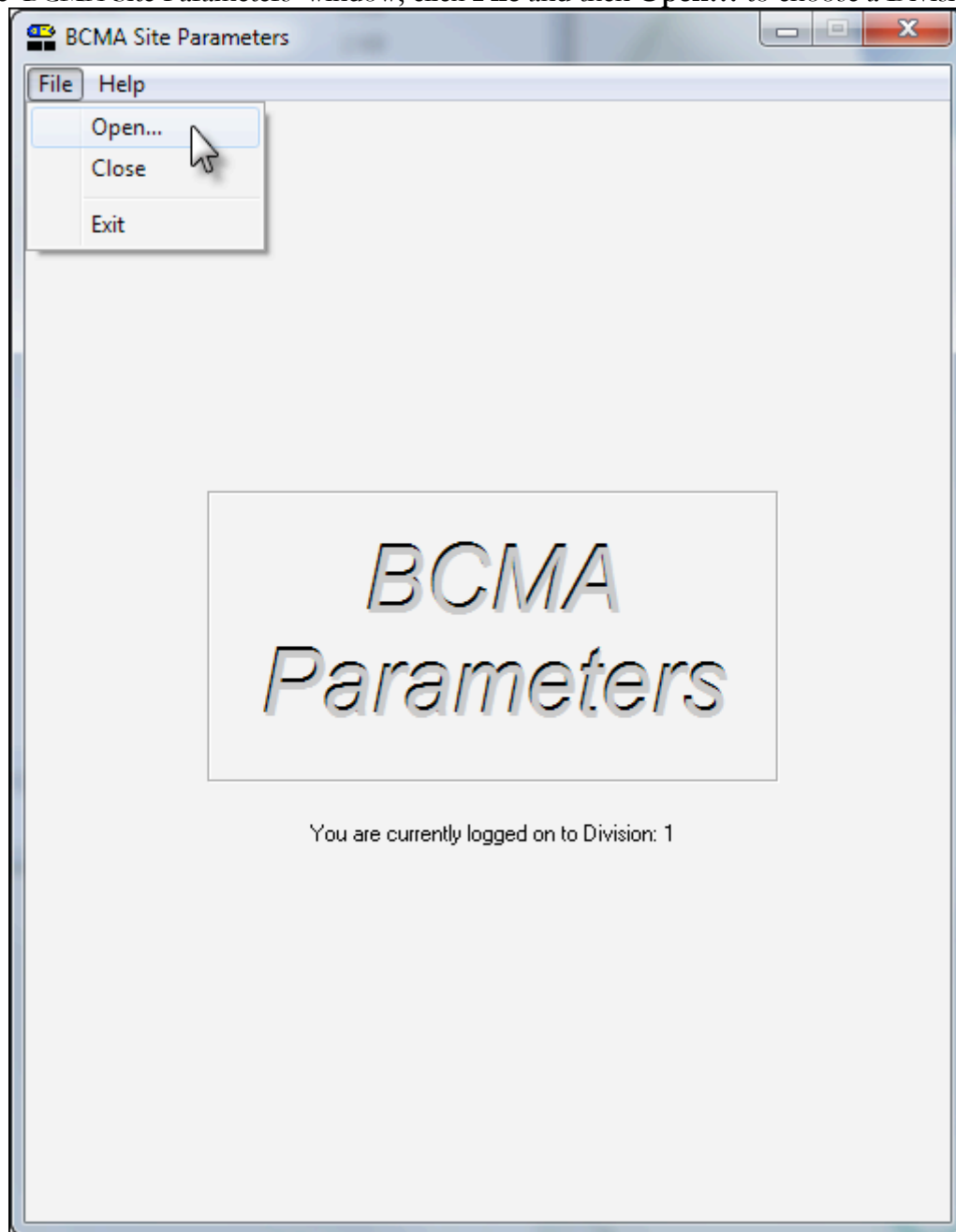
1. Double click the shortcut for 'vxBCMApar' located in the 'vxVista Applications' folder created earlier. Enter the Standard user's Access/Verify Code pair as shown below.



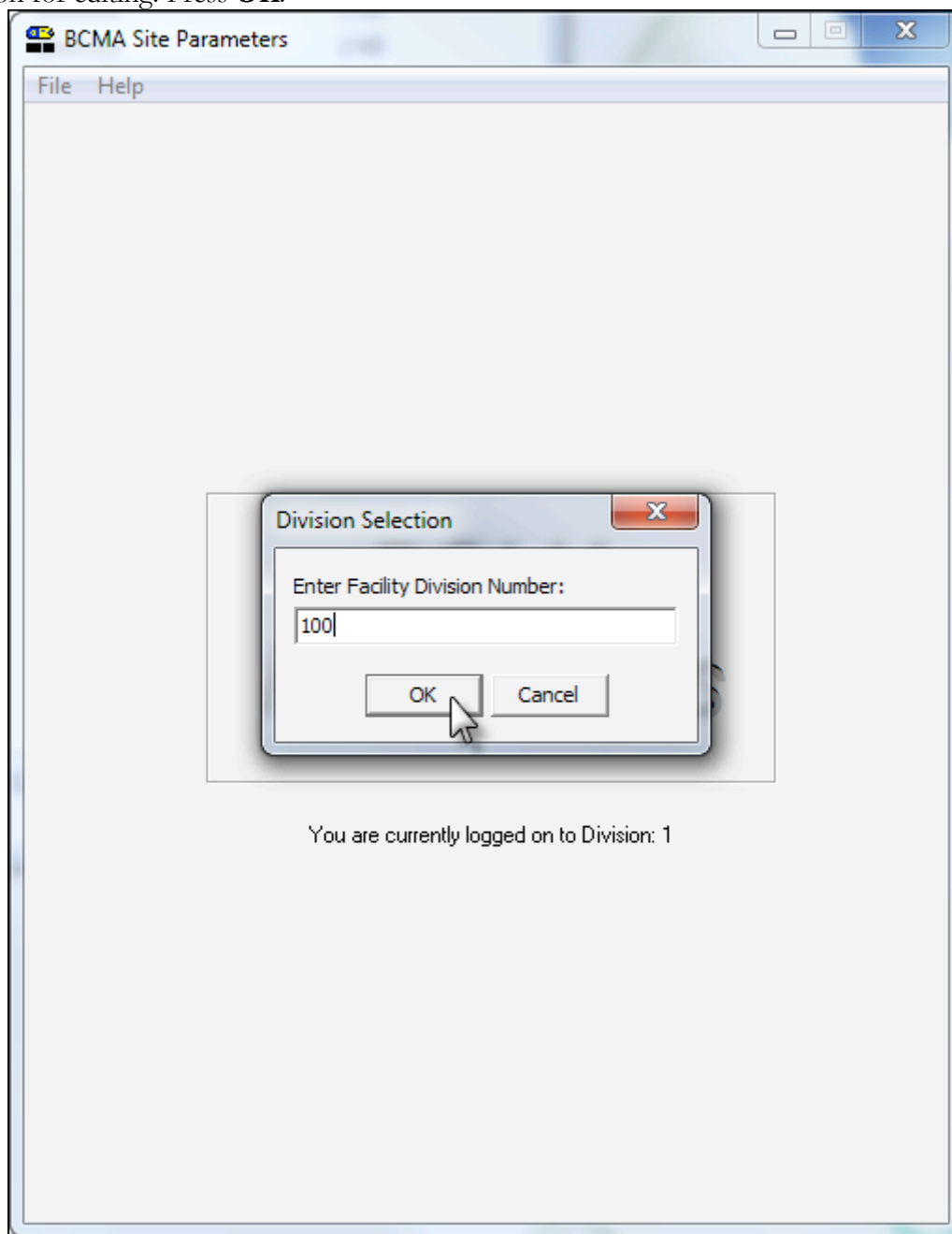
2. Press **OK** at the warning that pops up.



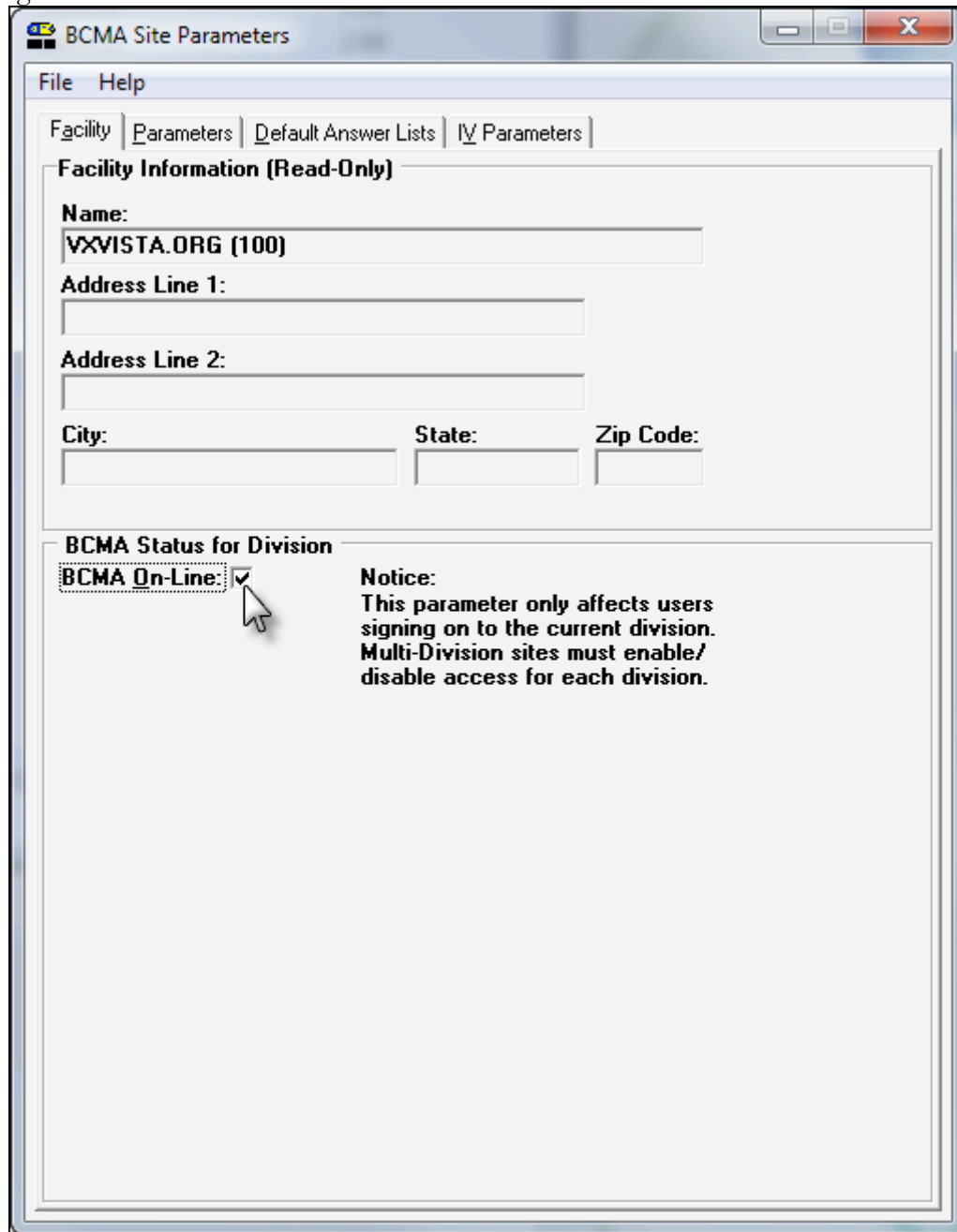
- On the 'BCMA Site Parameters' window, click **File** and then **Open...** to choose a Division.



4. Enter '100' in the 'Enter Facility Division Number:' textbox. This will open the 'VXVISTA.ORG' Division for editing. Press **OK**.



- Click the 'BCMA On-line:' check box to insert a check mark as shown. This will configure vxBCMA to run against the VXVISTA.ORG Division.



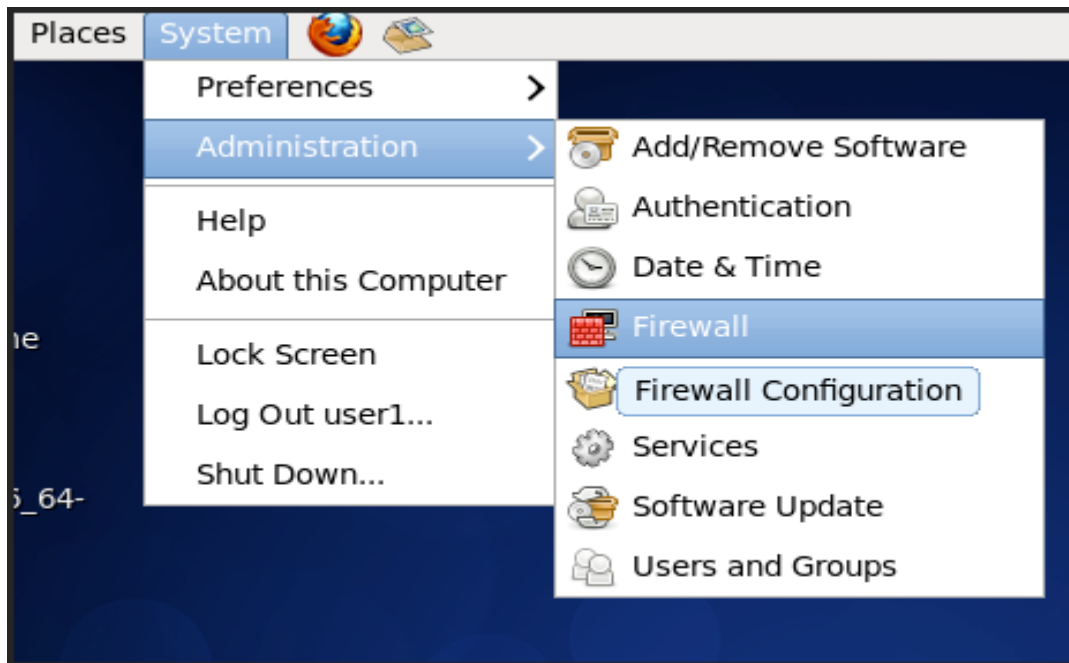
The screenshot shows a window titled "BCMA Site Parameters" with a menu bar containing "File" and "Help". Below the menu bar are four tabs: "Facility", "Parameters", "Default Answer Lists", and "IV Parameters". The "Parameters" tab is selected. The window is divided into two main sections. The top section is titled "Facility Information (Read-Only)" and contains several text input fields: "Name:" (containing "VXVISTA.ORG (100)"), "Address Line 1:", "Address Line 2:", "City:", "State:", and "Zip Code:". The bottom section is titled "BCMA Status for Division" and contains a checkbox labeled "BCMA On-Line:" which is checked. A mouse cursor is pointing at the checkmark. To the right of the checkbox is a "Notice:" box with the text: "This parameter only affects users signing on to the current division. Multi-Division sites must enable/disable access for each division."

- Click **File** and then **Exit**. vxBCMA is now configured for use.

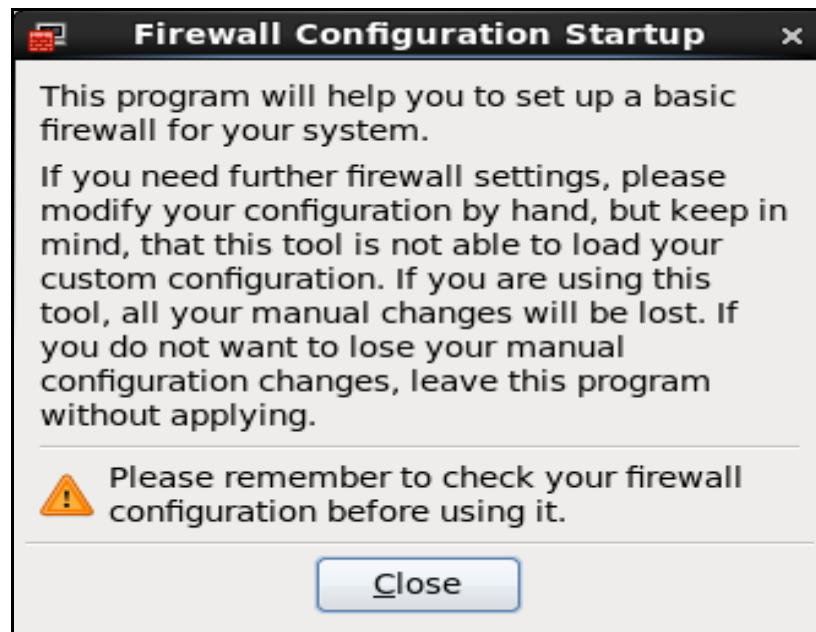
## Appendix A

### *Adding Port to Firewall*

Go to 'System->Administration->Firewall'



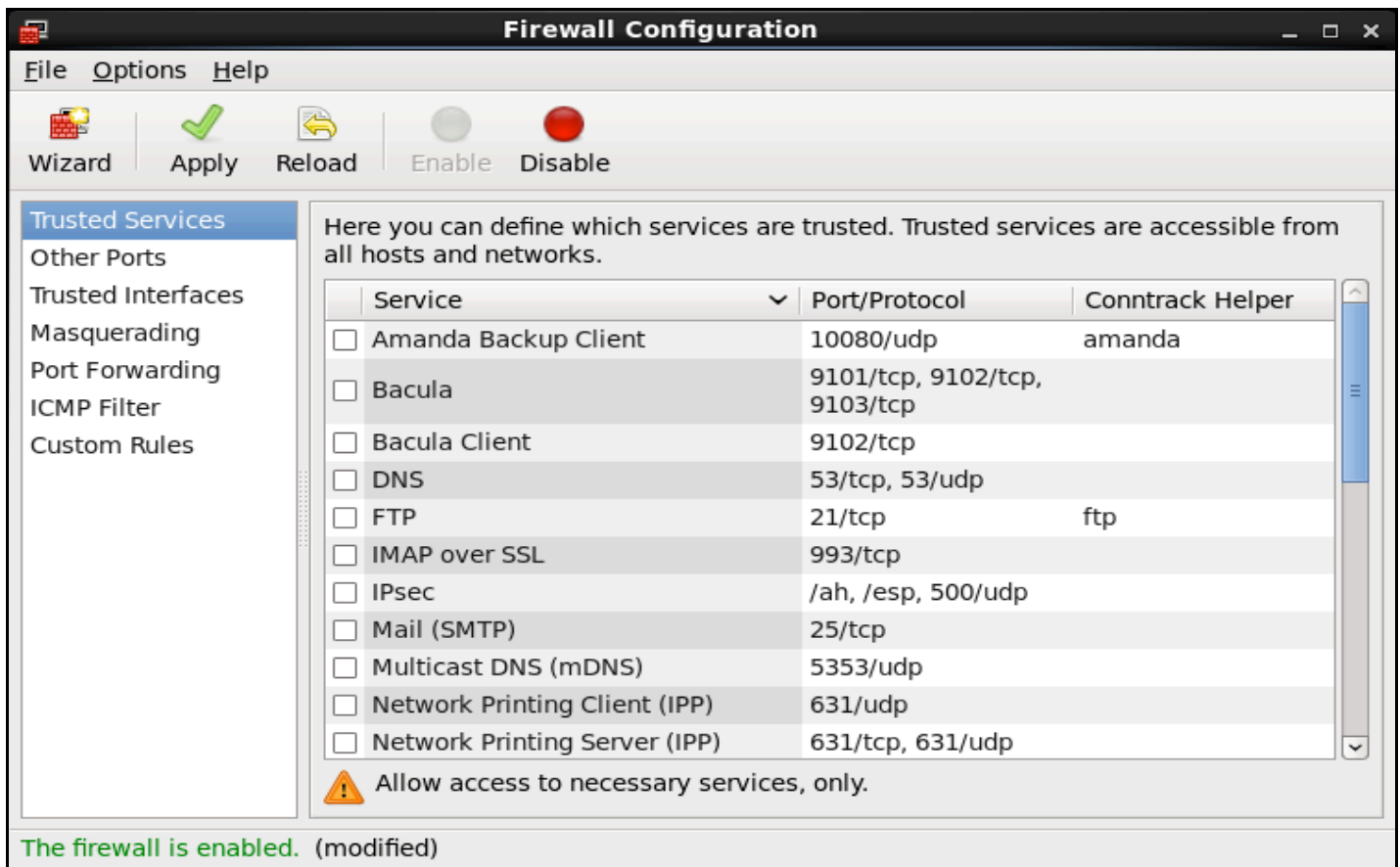
If prompted by the screen below click Close.





If prompted for authentication, enter root user password.

Look under Trusted Services Tab for the Service that will need to be allowed through the firewall. Check the service and click Apply.



## Appendix B

### *User Configuration - Menu Options & Keys*

#### **vx CPRS**

- Secondary Menu Options
  - VFDVX CPRS GUI CHART
- Security Keys
  - None

#### **vx BCMA**

- Secondary Menu Options
  - PSB GUI CONTEXT
  - OR BCMA ORDER COM
- Security Keys
  - PSB MANAGER (Only for Users designated to access vxBCMAPar App)

#### **vx GroupNotes**

- Secondary Menu Options
  - OR GN SET LOCATIONS
- Security Keys
  - OR GN ACCESS

#### **vx PatientPicture**

- Secondary Menu Options
  - VFDVXP PATIENT PIC CONTEXT
- Security Keys
  - VFDVXP PATIENT PIC ADMIN (Administrative Users Only)

#### **vx Vitals**

- Secondary Menu Options
  - VFDVX GMV V/M GUI
- Security Keys
  - GMV MANAGER (Only for Users designated to access vxVitalsManager App)

## Appendix C

### FAQs


**Why is it necessary to create and configure a new user; won't the Administrative user allow me to do everything I need?**

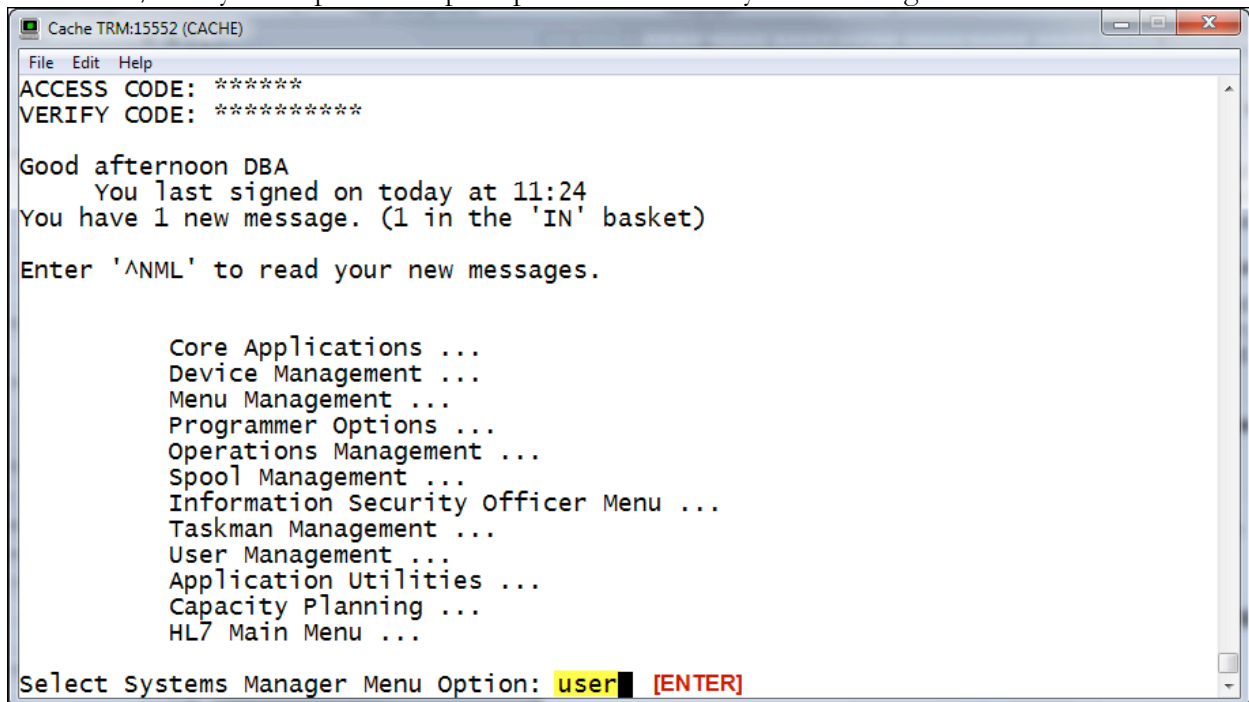
Adding 'Standard' users is necessary to test the full functionality of the software suite. The 'Administrative' account provided also contains privileges that can be detrimental to normal software performance if utilized by unqualified personnel.

**Why do I need to add Menu Options and Security Keys to users?**

The Secondary Menu Options and Security Keys listed in this manual are required for their associated applications to run. The 'Standard' user provided at the beginning of the installation guide has been setup with all required Menu Options and Keys for convenience.

**How do I know which Secondary Menu Options and Security Keys a particular user carries?**

1. Right click on the blue Cache cube  and select 'Terminal'. Use the 'Administrative' Access/Verify Code pair when prompted to enter the Systems Manager Menu.



```
Cache TRM:15552 (CACHE)
File Edit Help
ACCESS CODE: *****
VERIFY CODE: *****

Good afternoon DBA
  You last signed on today at 11:24
You have 1 new message. (1 in the 'IN' basket)

Enter '^NML' to read your new messages.

Core Applications ...
Device Management ...
Menu Management ...
Programmer Options ...
Operations Management ...
Spool Management ...
Information Security Officer Menu ...
Taskman Management ...
User Management ...
Application Utilities ...
Capacity Planning...
HL7 Main Menu ...

Select Systems Manager Menu Option: user [ENTER]
```

2. Type 'user' at the 'Systems Manager Menu Option:' prompt and press [ENTER]. Type 'user' again at the 'User Management Option:' prompt and press [ENTER].

```
Cache TRM:15552 (CACHE)
File Edit Help
Select NEW PERSON NAME:

Add a New User to the System
Grant Access by Profile
Edit an Existing User
Deactivate a User
Reactivate a User
List users
User Inquiry
Switch Identities
File Access Security ...
Clear Electronic signature code
Electronic Signature Block Edit
Manage User File ...
OAA Trainee Registration Menu ...
Person Class Edit
Reprint Access agreement letter

Select User Management Option: user Inquiry [ENTER]
Select NEW PERSON NAME: zztest,newuser ZZTEST,NEWUSER [ENTER] NZ
DEVICE: ;p-dec;80;9999 Console (Cache' on Windows) [ENTER]
```

3. Type ';p-dec;80;9999' at the 'DEVICE:' prompt and press [ENTER]. This allows the output (Shown Below) to be printed to Terminal in a steady stream that can be scrolled to view the information needed (List of Menu Options and Keys).

```
Cache TRM:15552 (CACHE)
File Edit Help
Last Sign-on ...Dec 27, 2013      Digital Pager .....
Has a E-SIG ....No             Write Med's .....
NPI .....                     Taxonomy .....
Person Class:

Primary Menu: ORZ MAIN MENU CLINICIAN  Clinician Menu
Secondary Menu(s)
-----
[VFDVX CPRS GUI CHART]          vxCPRSChart version 1.28.24.x
[PSB GUI CONTEXT - USER]       BCMA Client Context
[OR BCMA ORDER COM]            OR BCMA ORDER COM VERSION 1.0
[OR GN SET LOCATIONS]          Group Notes Locations version 1.0.12.0
[VFDVXP PATIENT PIC CONTEXT]   VFDVXP PATIENT PIC CONTEXT
[VFDVX GMV V/M GUI]            Vitals/Measurements GUI Application

Keys Held
-----
GMV MANAGER          OR GN ACCESS          ORES          PROVIDER
PSB MANAGER          VFDVXP PATIENT PIC ADMIN

Patient Selection
-----
Restrict?: NO
```

4. Close Terminal.