Bar Code Medication Administration (BCMA)
BCMA Backup System (BCBU)
InterSystems Caché Installation Setup

Version 3.0
April 2016

Department of Veterans Affairs (VA)
Office of Information and Technology (OIT)
Product Development (PD)
## Revision History

<table>
<thead>
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<th>Date</th>
<th>Revision</th>
<th>Description</th>
<th>Author</th>
</tr>
</thead>
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<tr>
<td>04/2016</td>
<td>PSB<em>3</em>91</td>
<td>Document update for installation of Cache version 2014.</td>
<td>REDACTED</td>
</tr>
<tr>
<td>04/2015</td>
<td>PSB<em>3</em>84</td>
<td>Document updated by REDACTED. Entire document reformatted.</td>
<td>REDACTED</td>
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1 InterSystems Caché Installation Setup


The Caché software was downloaded from the VA FTP sites and is located under the corresponding version of the CACHE folder. To start the setup locate the downloaded executable and run it.

Accept the license agreement and click Next.

![License Agreement](image)

Figure 1

Click NEXT at the Define Cache Instance Name.
InterSystems Caché Installation Setup

Figure 2
Click **Next** at Destination Folder.

Figure 3
Choose **Development** and click **Next**.
Figure 4

Continue following the instructions and accept the defaults for your system.
Figure 5

Click Install.

Figure 6
Uncheck **Display the Getting Started page** and click **Finish**.

Upon the completion of a successful installation, a "Blue Cube" will appear on the PC toolbar in the lower right hand side of the screen.
1.1 Caché Configuration Manager

Caché must be configured with databases, namespaces, and routines by using the Management Portal located on the Caché cube menu options.

Right clicking on the cube will display the menu options for Caché, and then choose Management Portal.
1.1.1 Adding a Database

The first step is to add a Database. From the Main Screen, choose the Menu button and then Configure Databases.
Figure 11

Select the **Local Database** option and then **Create New Database** button.
Type **VISTA** as the name of the database and enter **C:\BCMABU** into the Directory Selected field. Click **NEXT** to continue.
Figure 13
Verify values entered and click **FINISH**.
Figure 14

The newly created database should now appear in the list (bottom of the list) with C:\BCMABU\ as its directory.
1.1.2 Adding a Namespace

We will create the namespace VISTA and attach it to the VISTA database.
Click the **MENU** button and choose **Configure Namespaces**.
Figure 16
Click Create New Namespace button.
Figure 17

Type **VISTA** as the namespace and select **VISTA – C\BCMABU\** as the existing database. Click **Save**.
Use the form below to create a new namespace:

![Namespace Creation Form](image)

**Figure 18**

VISTA namespace should be seen in the listing of Caché Namespaces.
1.1.3 Global and Routine Mapping

Global and Routine Mappings are created under the Configuration Namespaces option by selecting Global Mappings and Routine Mappings for the VISTA namespace.
1.1.4 Global Mapping

Click Global Mappings for the VISTA namespace. Then click New to create the global mapping definition as shown in the following slide.
The global mappings for namespace VISTA are displayed below:

<table>
<thead>
<tr>
<th>Global</th>
<th>Subscript</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Z*</td>
<td></td>
<td>VISTA</td>
</tr>
</tbody>
</table>

**Figure 21**

The Global Database Location is **VISTA** and the Global name is **%Z***. Click **Apply** (Figure 22) and **Save Changes**.
1.1.5 Routine Mapping

Click the **Menu** button (Figure 23) and then **Configure Namespaces**.

Select Routine Mapping.

![Menu and Configure Namespaces](image)

**Figure 23**

Select **New Routine Mapping**. Type the first routine name, %DT*, (Figure 24) in the space provided and select VISTA as the routine database location. Click **Apply**. Repeat this procedure for routine names %RCR, %XU* and %Z*. When complete, your routine mapping should appear as shown in Figure 25. Click **Save Changes** and close this window.
Shut down CACHÉ

Click the Blue Cube (PC toolbar in the lower right hand side of the screen) and choose Stop Cache.
1.1.6 Cache Licenses install

The license information is a text file sent to you by InterSystems (cache.key). Copy and paste into the `C:\InterSystems\Cache\mgr` folder.

CACHE.DAT

Figure 26

You will see the following screen as CACHE shuts down.

![CACHE shutting down screen](image)

Figure 27
Copy the **CACHÉ.DAT** file you downloaded from the VA FTP site and copy it to the **C:\BCMABU** folder.

You may receive a message stating the file is already present and do you want to replace it with the file you are importing. If so, answer **YES**.

### 1.1.7 Removing Read/Archive Properties

Using the "Windows Explorer", remove the Read and Archive Properties from the CACHÉ.DAT file. Right click “CACHÉ.DAT” and select "Properties" under the General Tab and Click Advance to remove Archive. Click Apply and then OK.

![Figure 28](image)

#### Figure 28

### 1.2 Telnet Instructions

Start Caché. Note: The Cache Cube icon is Gray in color at this point, not Blue.
What we are going to do next is to move the ZSTU routine from the VISTA namespace to the %SYS namespace using the Management Portal.

Select Menu button then View Routines.
Select VISTA for the Look in Namespace on the left side of the screen.
Enter ZSTU*.* in the Routines box and click **Export**.
Figure 31

Make sure the check box is selected for the routine (ZSTU.int).

Click Export.
When finished, a message stating it was completed should appear, click **Done** when complete.
Figure 33

Click the **Menu button** and then **View Routines**. See steps 1-6 to accomplish the following: Select the `%SYS` namespace (left side of screen). Select **Import** from across the top. Browse to the path where you exported the routine. Select the routine and click **OK**.
Figure 34

Step 1.

Click the **Browse** button.
Figure 35

**Step 2.**

Use the folder icon on the right to get to the C:
InterSystems Caché Installation Setup

Figure 36

Step 3.

Click BCMABU.
Figure 37

Step 4.

Click `export.ro` and then the OK button.
Figure 38

*Step 5.*

Click the **Next** button.
Figure 39

Step 6.

Make sure the box is checked by ZSTU.INT. Click Import. The successful completion message should appear as shown in the following screen.
Click Done.

**Figure 40**

### 1.3 Setting up Telnet and Terminal Users

We will be using the Management Portal to set up the Unknown User so the Telnet and Terminal Users will connect to the VISTA namespace using the routine ZU.

Click **HOME**.

From the **Menu** button select **Manage Users**. The User Accounts will be displayed.
The following is a list of user definitions:

<table>
<thead>
<tr>
<th>Name</th>
<th>Full Name</th>
<th>Enabled</th>
<th>Namespace</th>
<th>Routine</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>System Administrator</td>
<td>Yes</td>
<td>Cache password user</td>
<td>Delete</td>
<td>Profile</td>
</tr>
<tr>
<td>CSPUser</td>
<td>CSP Gateway user</td>
<td>Yes</td>
<td>Cache password user</td>
<td>Delete</td>
<td>Profile</td>
</tr>
<tr>
<td>Superuser</td>
<td>System Super user</td>
<td>Yes</td>
<td>Cache password user</td>
<td>Delete</td>
<td>Profile</td>
</tr>
<tr>
<td>UnknownUser</td>
<td>Unauthenticated user</td>
<td>Yes</td>
<td>USER</td>
<td>Cache password user</td>
<td>Profile</td>
</tr>
<tr>
<td>Public</td>
<td>(Internal use - not for login)</td>
<td>No</td>
<td>Cache password user</td>
<td>-</td>
<td>Profile</td>
</tr>
<tr>
<td>System</td>
<td>SQL System Manager</td>
<td>Yes</td>
<td>Cache password user</td>
<td>-</td>
<td>Profile</td>
</tr>
</tbody>
</table>

Figure 41

Click on the **UnknownUser** to edit it. Select **VISTA** as the Startup Namespace and enter ^ZU as the Startup Tag^Routine. Click **Save** then **Close this window**.

(Note: For programmer access, %PMODE in Default Tag^Routine.)

Figure 42

After the edits are done the screen should look like this.
Figure 43

**IMPORTANT NOTE**: Stop and restart Caché. This will be the BCMA Backup Application. The start-up routine ZSTU will automatically start up TaskManager.

Verify certain parameters are set for proper operation.

From the Management Portal

Choose **Menu**, and then **Manage Services**. Click `%Service Telnet` (Figure 45) and set `%Service Telnet Enabled = Yes and Public = Yes.`

If not, click item and change the settings.
Services are the primary means by which users and computers connect to Caché. The following services are currently available:

<table>
<thead>
<tr>
<th>Name</th>
<th>Enabled</th>
<th>Public</th>
<th>Authentication Methods</th>
<th>Allowed Connections</th>
<th>Description</th>
<th>Two-Factor Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Service_Redis</td>
<td>Yes</td>
<td>N/A</td>
<td>Password, Unauthenticated</td>
<td>unrestricted</td>
<td>Controls SQL or Objects</td>
<td>No</td>
</tr>
<tr>
<td>%Service_CSP</td>
<td>Yes</td>
<td>Yes</td>
<td>Password, Unauthenticated</td>
<td>unrestricted</td>
<td>Controls CSP Gateway access</td>
<td>No</td>
</tr>
<tr>
<td>%Service_CacheDirect</td>
<td>Yes</td>
<td>Yes</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls Cache Direct</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Callin</td>
<td>Yes</td>
<td>Yes</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls the Call-in Interface</td>
<td>No</td>
</tr>
<tr>
<td>%Service_ConPod</td>
<td>No</td>
<td>Yes</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls COM ports attached to a Windows system</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Console</td>
<td>Yes</td>
<td>Yes</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls CTERM (TRU pcli) and the Windows Console</td>
<td>No</td>
</tr>
<tr>
<td>%Service_DaCheck</td>
<td>No</td>
<td>N/A</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls this system as a DaCheck source</td>
<td>No</td>
</tr>
<tr>
<td>%Service_ECP</td>
<td>No</td>
<td>N/A</td>
<td>Unrestricted</td>
<td>restricted</td>
<td>Controls Enterprise Cache Protocol (ECP)</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Lsn</td>
<td>Yes</td>
<td>No</td>
<td>Password</td>
<td>unrestricted</td>
<td>Controls SYSTEM Security Login</td>
<td>No</td>
</tr>
<tr>
<td>%Service_MMActivate</td>
<td>No</td>
<td>N/A</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls MSM Activate Protocol</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Mirro</td>
<td>No</td>
<td>N/A</td>
<td>Unrestricted</td>
<td>restricted</td>
<td>Controls Mirroring</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Monitor</td>
<td>No</td>
<td>N/A</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls UNWIP and remote Monitor commands</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Shadow</td>
<td>No</td>
<td>N/A</td>
<td>Unrestricted</td>
<td>restricted</td>
<td>Controls if this system can be the source of a shadow</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Telnet</td>
<td>Yes</td>
<td>Yes</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls Telnet sessions on a Windows server</td>
<td>No</td>
</tr>
<tr>
<td>%Service_Webd</td>
<td>No</td>
<td>N/A</td>
<td>Unauthenticated</td>
<td>unrestricted</td>
<td>Controls Webd</td>
<td>No</td>
</tr>
</tbody>
</table>

Return to **Home**, select **System Administration**, then **Configuration** then **Device Settings**, then **Telnet Settings** then **GO** under **View or edit telnet definitions**. Set Telnet **Port** to **19210**. Default setting is 23. (Figures 46-47)
Click **Home**, then **Menu** then **Configure Memory**.
Figure 48
Make sure the “Auto-start on System Boot” is checked. If not, check it and click **Save**. Close this window.
1.4 Setting up the BCMA Shortcut

To create the shortcut from scratch, right click anywhere on the desktop and select New/Shortcut.
Figure 50

Enter `C:\InterSystems\Cache\bin\css.exe CTERMINAL CACHE` in the *Type the location of the item box*. Click **Next**.
Figure 51

Enter BCBU in the *Type a name for this shortcut* and click Finish (Figure 52).

Copy the Shortcut BCBU Icon to the All User Desktop.
Double-click the BCBU shortcut icon to enter the Backup system on the PC Workstation. Use the appropriate access and verify code to access the system.
Figure 53

Figure 54
This completes the setup of InterSystems Caché on the BCBU contingency workstation. Refer to the BCBU VistA Install Guide to complete the package setup.

How to Setup the Printer in BCBU PC.

Hook up the printer to the PC.

Install the Window printer drivers.

Click BCBU icon on PC and log in as user that has programmer privileges.

Select Systems Manager Menu Option: Device Management

Select Device Management Option: Device Edit

Select Device Edit Option: TRM, TRM, or VTRM Device Edit

Select Terminal/Printer Device: BCBU

1.4.1 Edit a TRM or VTRM device

NAME: BCBU PRINTER LOCATION: BCBU WORKSTATION

$1: [PRN] Name of the window’s printer

Example: Window's printer is Lexmark T650 PS3, then enter [PRN] Lexmark T650 PS3

Alt $1:

TYPE: TERMINAL

SUBTYPE: P-HP-P16

SIGN-ON/SYSTEM DEVICE: NO

VOLUME SET(CPU):

ASK DEVICE: NO MARGIN WIDTH:

ASK PARAMETERS: NO PAGE LENGTH:

QUEUING: FORCED SUPPRESS FORM FEED:

Save and Exit.