

## BroadVision Hotpatch BVNqaXXXXX

Updated: 28 Nov 2008

Note: XXXXX refers to the specific BVNqa number of the hotpatch

**Important Note:** Before installing the hotpatch, please carefully review the document *About\_the\_installer.pdf* and contact BroadVision Support (support@broadvision.com) if you have any questions. It is important to understand that the installer assumes that *\$BV1TO1\_VAR/installableApps/bv\_framework* contains the current version of all application war files. If this is not the case, hotpatch installation may overwrite custom changes in application war files. If you have any doubts or questions on what changes a hotpatch installation will make, contact BroadVision Support before installing the hotpatch.

### Hotpatch Installation Notes:

The installer automatically makes a backup of files and classes that are changed into the directory *\$BV1TO1/patch/BVNqaXXXXX/backup.<timestamp>*. If a war file is updated, the entire war file is backed up, not just the members that are changed. A list of the files and classes updated by the hotpatch is in the file *\$BV1TO1/patch/BVNqaXXXXX/patchManifest.xml*. Review this file before hotpatch installation.

Detailed information on the files that are changed is logged in the file *BVNqaXXXXX.exec-update-script.<datetimestamp>.log* in *\$BV1TO1/patch/BVNqaXXXXX/logs* by the installation process. Review this log file after hotpatch installation for any installation error.

Changed files and classes will be updated in every war where the installer finds them. For example, if you renamed portal.war to MyApp.war, this war will be updated. This also applies to a customized version of bvmc.war that is not called bvmc.war. Backup all files with custom changes to a directory outside of the BV installation before installing a hotpatch. You need to review which files are changed when installing the hotpatch to check if any custom changes need to be reapplied after installing the hotpatch.

You also need to check if a hotpatch includes any source files for classes that may be customized as a normal part of application development (these are installed in *\$BV1TO1/source* when a BV product is installed). If source files are included, the source files will be updated in *\$BV1TO1/source/broadvision*. If you have customized any of those classes, you need to reapply your customizations using the new source files.

A WorkBench-only installation does not have *ant* and *bvant* in the BV installation directory, and the installer will not install these. If you have a WorkBench-only installation, you need to apply a hotpatch that installs *ant* and *bvant*. If you have not already installed this, please contact BroadVision Support to request this hotpatch.

The installer does not update the WSRP producer. If you are using WSRP, contact BroadVision Support before installing the hotpatch.

If you are using WebSphere, you must update the site properties by editing the *wars.properties* file before applying the hotpatch. See "Installation Instructions" below.

The installer does not do a complete installation automatically in a cluster configuration; manual steps are required as detailed below.

All patches/hotpatches can be installed multiple times, unless specified otherwise. All patches/hotpatches should be installed on all instances of a cluster, unless specified otherwise.

The installation process can take a significant amount of time.

### Hotpatch Testing:

Hotpatches are provided by BroadVision Support to deal with time critical issues that cannot wait until the next patch release. Hotpatches do not receive the same amount of QA testing as a patch release. Customers are strongly advised to test and validate hotpatches in their own development/testing environment before installing in a production environment.

### Hotpatch Format:

Hotpatches may be distributed in either jar or zip format. On Unix you should run unzip (not jar) to open a hotpatch zip file because unzip preserves file permissions, but jar does not. Run "unzip -n" on Unix to avoid the question about overwriting files. If you do use jar on Unix, you need to restore file execution permissions as follows:

```
cd $BV1TO1/patch/BVNqaXXXX/installer/bin
chmod 550 *.sh
```

### Installation Instructions:

If you are using WebSphere, you must ensure that the file `$BV1TO1/patch/BVNqaXXXX/scripts/wars.properties` specifies the relevant war file name and associated Service Name for the BV application. To do this:

- a. Open the `wars.properties` file for editing. This file contains the BroadVision default values for the war file:

```
portalWars=portal:C3
bvmcWars=bvmc
bpmapp-sampleWars=bpmapp-sample
...
```

- b. Update this data to specify your site configuration by specifying the war filename followed by a colon and the service name (if different from the default).

#### 1. Source the environment configuration file

<i>Unix/Linux</i>	<i>Windows</i>
cd \$BV1TO1/bin	cd %BV1TO1%\bin
./setEnv.sh	setEnv.cmd

#### 2. Shutdown the application servers

<i>Unix/Linux</i>	<i>Windows</i>
\$BV1TO1/bin/stopServers.sh	%BV1TO1%\bin\stopServers.cmd

Note: Check that no Workbench is running.

#### 3. Unpack the hotpatch file

##### 3.1 For a jar

<i>Unix/Linux</i>	<i>Windows</i>
cd \$BV1TO1	cd %BV1TO1%
jar xvf BVNqaXXXX.jar patch	jar xvf BVNqaXXXX.jar patch

It is not necessary to unpack the META-INF directory.

##### 3.2 For a zip

<i>Unix/Linux</i>	<i>Windows</i>
cd \$BV1TO1	use a zip GUI to unpack the zip
unzip -n BVNqaXXXX.zip or	
	cd %BV1TO1%
	jar xvf BVNqaXXXX.zip

#### 4. Run the hotpatch installer

<i>Unix/Linux</i>	<i>Windows</i>
cd \$BV1TO1/patch/BVNqaXXXX/installer/bin	cd BV1TO1%\patch\BVNqaXXXX\installer\bin
install-patch.sh BVNqaXXXX	install-patch.cmd BVNqaXXXX

## Additional installation Instructions for Cluster Configurations:

### Definitions

**Primary instance** - the application server instance where the initial installation and setup has been done. It is named "bv\_framework" by default. Applicable to JBoss only.

**Clustered instances** - one of the application server instances created and setup according to the "Clustering application servers" chapter in the Installation Guide. By default, these are named "bv\_framework0", "bv\_framework1", etc. Applicable to JBoss only.

**Shared Installation** – clustering of server instances across multiple machines where the file system is shared, so that the BV1TO1 and BV1TO1\_VAR directories are accessed by all the instances across the machines.

**Non-Shared Installation** – clustering of server instances across multiple machines where the file systems are *not* shared. Thus, each machine has its own copy of the BV1TO1 and BV1TO1\_VAR directories.

### 1. JBoss Cluster

If required by the hotpatch changes, the bvf.ear file is updated at `$BV1TO1_VAR/installableApps/bv_framework/`. Modifications described in the section "Enabling the EJB cluster" of the Installation Guide are lost during this operation, and they must be reapplied.

For installation in a cluster, the installer will still attempt to deploy changes to the primary instance. If the primary instance is not configured, the installer step that attempts to start the instance will fail. That error can be ignored, and no files are deployed to the primary instance.

Remember to shutdown the servers and ensure that no Workbench is running before installing a hotpatch.

#### **Case 1: A JBoss cluster on *one* machine or on multiple machines with a *shared* installation**

- i) Install the hotpatch on one machine.
- ii) After the hotpatch installation, copy the war files from the primary instance to all the clustered instances.
- iii) If bvf.ear has been updated, copy bvf.ear from `$BV1TO1_VAR/installableApps/bv_framework` to one of the clustered instances, e.g. `bv_framework0` at `$BV1TO1/JBoss/server/bv_framework0/deploy/`
- iv) Update bvf.ear in that clustered instance by following the steps in the "Enabling the EJB cluster" section in the "Clustering application servers" chapter of the Installation Guide.
- v) Copy the updated "clustered" bvf.ear from `$BV1TO1/JBoss/server/bv_framework0/deploy/` directory to all the other clustered instances:
  - `$BV1TO1/JBoss/server/bv_framework1/deploy/`
  - `$BV1TO1/JBoss/server/bv_framework2/deploy/`
  - ...

## Case 2: A JBoss cluster on multiple machines with *non-shared* BV installations

On machine A:

- i) Install the hotpatch on this machine.
- ii) After the hotpatch installation, copy the war files from the primary instance to all the clustered instances on that machine.
- iii) If bvf.ear has been updated, copy bvf.ear from `$BV1TO1_VAR/installableApps/bv_framework` to one of the clustered instances, e.g. `bv_framework0` at `$BV1TO1/JBoss/server/bv_framework0/deploy/`
- iv) Update bvf.ear in that clustered instance by following the steps in the “Enabling the EJB cluster” section in the “Clustering application servers” chapter of the Installation Guide.
- v) Copy the updated clustered bvf.ear from `$BV1TO1/JBoss/server/bv_framework0/deploy/` directory to all the other clustered instances on that machine, if any:
  - `$BV1TO1/JBoss/server/bv_framework1/deploy/`
  - `$BV1TO1/JBoss/server/bv_framework2/deploy/`
  - ...

On machine B:

- vi) Install the hotpatch on this machine.
- vii) Repeat step ii).
- viii) Copy the updated clustered bvf.ear from any clustered instance on machine A, e.g. `$BV1TO1/JBoss/server/bv_framework0/deploy/`, to all the clustered instances on this machine.
- ix) Repeat steps vi) through viii) for every other machine hosting the JBoss cluster.

## 2. WebLogic Cluster

- Use the WebLogic Admin Console to un-deploy the BroadVision application
- Install the hotpatch on the primary instance
  - the Installer may report an error when it tries to start the WebLogic service
  - this error can be ignored
  - use the WebLogic Admin Console to deploy the ear and war files from the `$BV1TO1_VAR/installableApps/bv_framework` folder with the cluster chain

*Note* : If there are multiple BroadVision installations (`$BV1TO1` and `$BV1TO1_VAR`), install the hotpatch on each installation.

## 3. WebSphere Cluster

- Use the WebSphere Admin Console to un-deploy the BroadVision application
- Install the hotpatch on the primary instance
  - the Installer may report an error when it tries to start the WebSphere service
  - this error can be ignored
  - use the WebSphere Admin Console to deploy the ear and war files from the `$BV1TO1_VAR/installableApps/bv_framework` folder with the cluster chain

*Note* : If there are multiple BroadVision installations (`$BV1TO1` and `$BV1TO1_VAR`), install the hotpatch on each installation.