



Bulk Configuration Utility – Configuration Management Tasks

Applies to:	<ul style="list-style-type: none">▪ Bulk Configuration Utility▪ SmartZone Gateways
Objective:	Replicate, back-up, and restore Gateways using the Bulk Configuration Utility (BCU)
Documentation Reference:	Bulk Configuration Utility User Manual
Pre-Requisites:	<ul style="list-style-type: none">▪ Bulk Configuration Utility▪ SmartZone Gateways

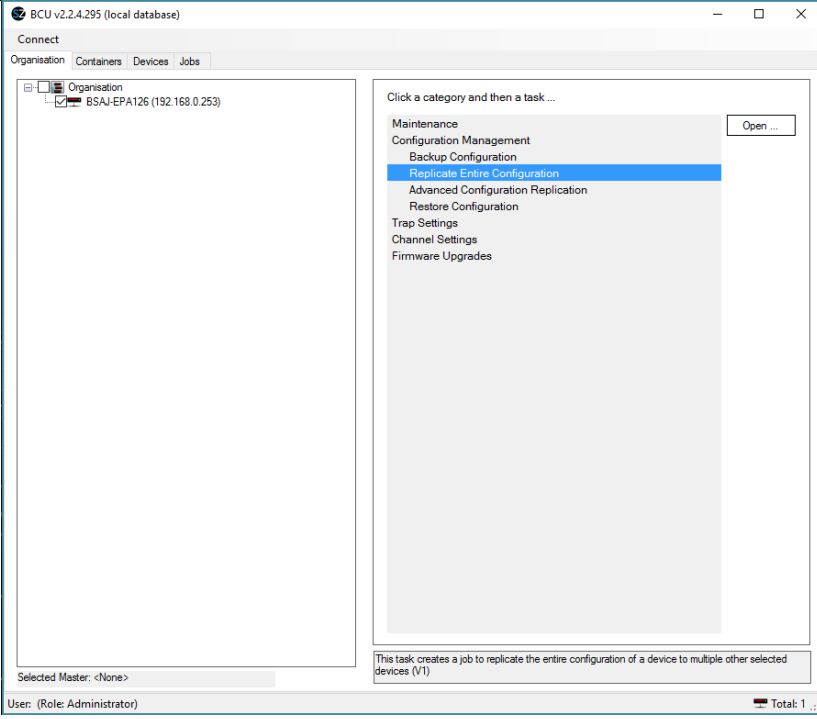
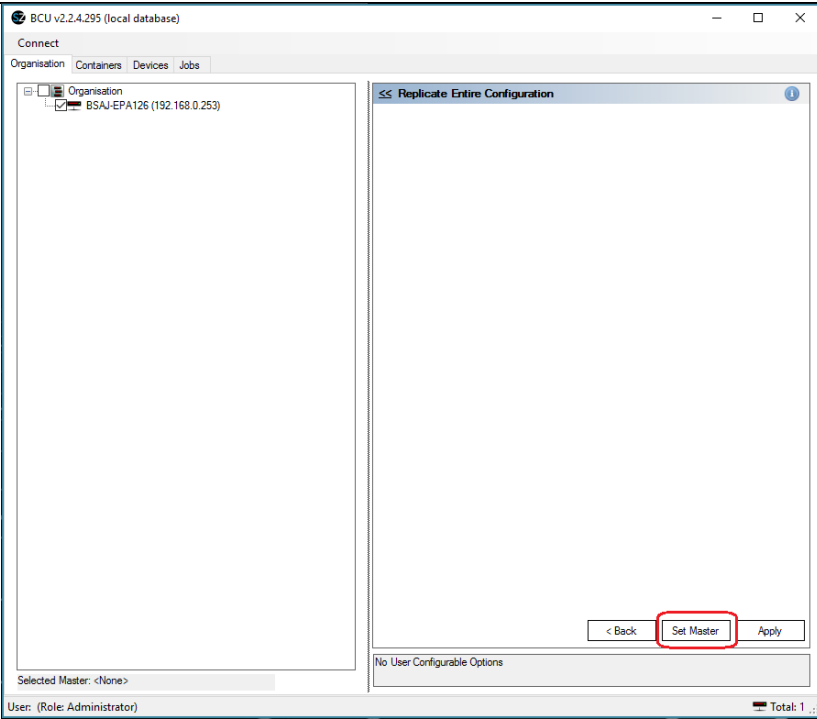
Description

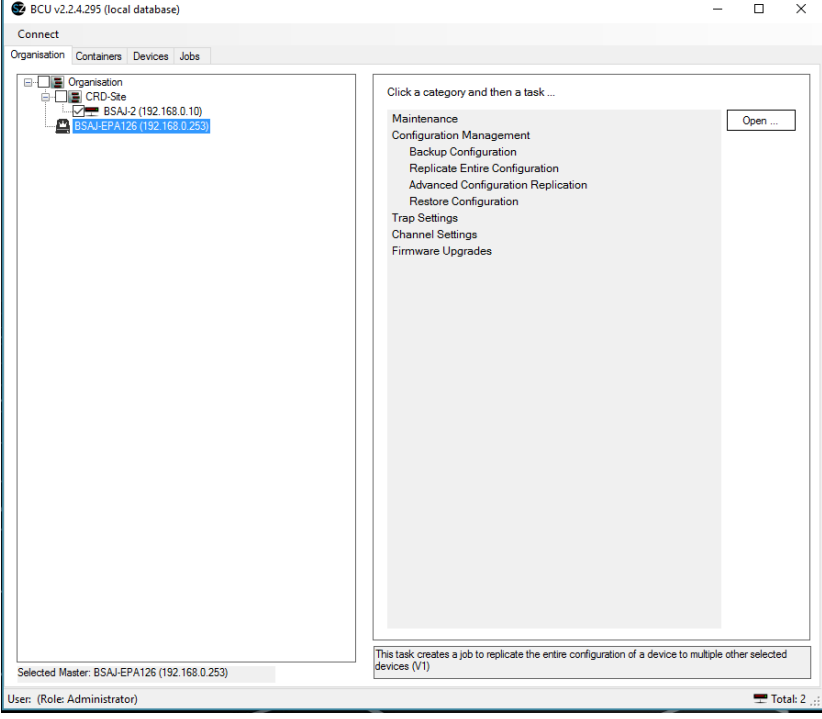
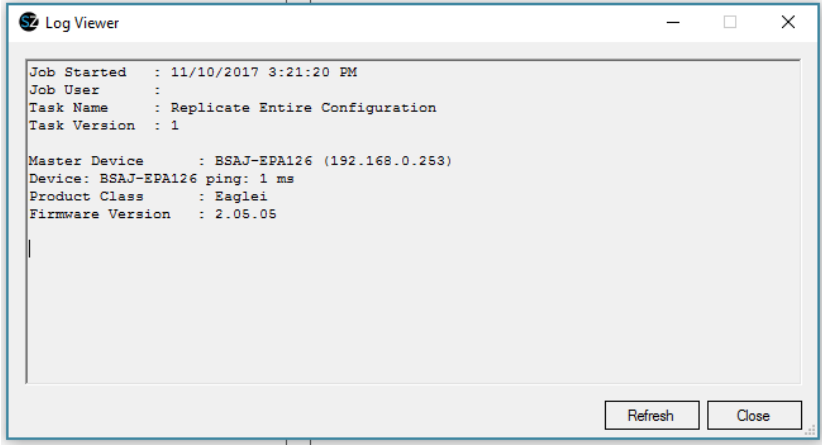
BCU Configuration management tasks provide a means to backup and restore the configuration of devices and a way of rolling out configuration changes to multiple Gateways.

Performing the Procedure

Replicate Entire Configuration

This task creates a job to replicate the entire configuration of a Gateway to other selected Gateways. The configuration data for a device is stored in its EEPROM (non-volatile) memory.

Step	Instruction		Result
1	<p>Check the source Gateway with the desired configuration in the Device Tree, select Replicate Entire Configuration, and click Open.</p>	 <p>The screenshot shows the 'Connect' window with a tree view on the left containing 'Organisation' and 'BSAJ-EPA126 (192.168.0.253)'. On the right, a list of tasks is displayed, with 'Replicate Entire Configuration' highlighted in blue. An 'Open ...' button is visible at the top right of the task list. A status bar at the bottom indicates 'Selected Master: <None>' and 'User: (Role: Administrator)'. A tooltip at the bottom right explains that this task creates a job to replicate the entire configuration of a device to multiple other selected devices (V1).</p>	<p>The Set Master button displays at the bottom of the window.</p>
2	<p>Click the Set Master button.</p>	 <p>The screenshot shows the same interface as above, but with a dialog box titled '<< Replicate Entire Configuration' open. The dialog is mostly empty, with a status bar at the bottom indicating 'No User Configurable Options'. At the bottom of the dialog, there are three buttons: '< Back', 'Set Master' (which is highlighted with a red rectangle), and 'Apply'. The status bar at the bottom of the main window remains the same.</p>	<p>The selected Gateway is set as the master configuration (shown in the device tree with a crown icon), which can then be replicated across multiple Gateways.</p>

Step	Instruction		Result
3	Select the targeted Gateways from the Device Tree and then click Apply .		The Replicate job runs for the Gateways targeted to receive the desired Gateway configuration.
4	Click the Jobs tab and double-click the Replication job when it displays as complete.		Results for this job display. When the job completes successfully, the Master Gateway's configuration is replicated across the target Gateways.
End of Steps			

Backup Configuration

This task creates a job to back up the configuration of multiple devices. A backup file will be created for each device, each time this Backup Configuration task is performed. The filenames will be auto-generated and will be of the form:

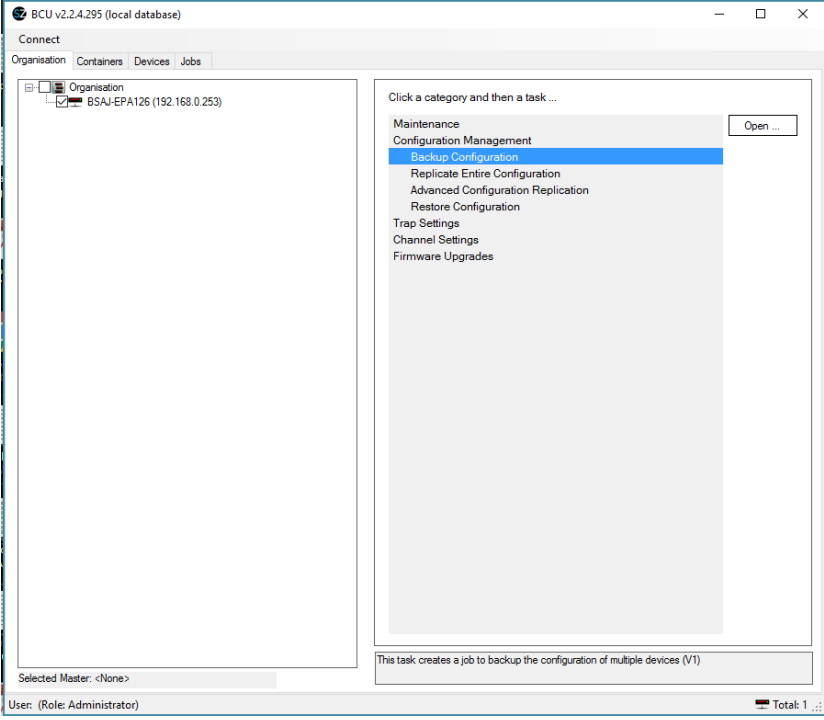
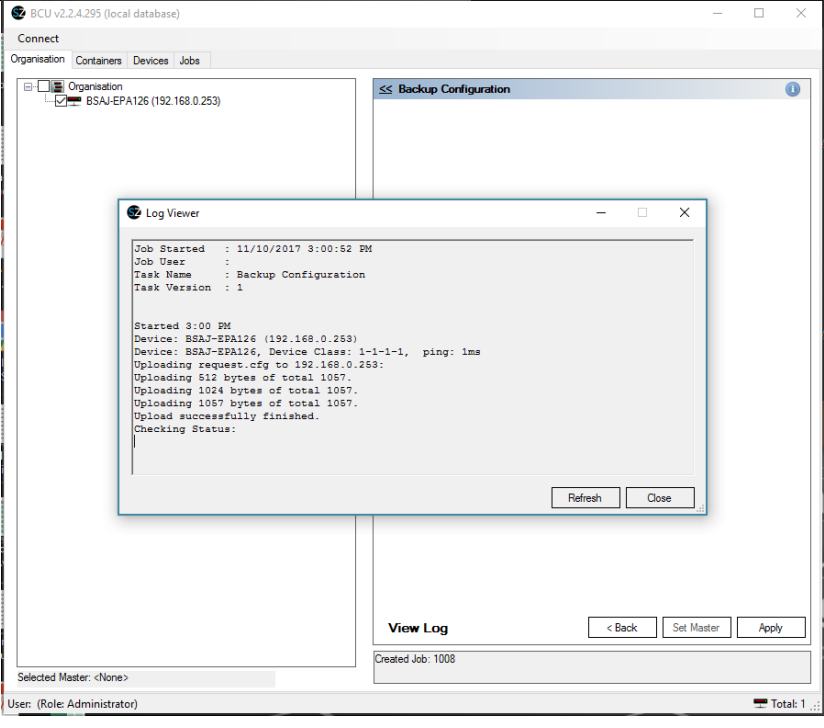
`<mac address>-<device name>-YYYYMMDDhhmmss.cfg`

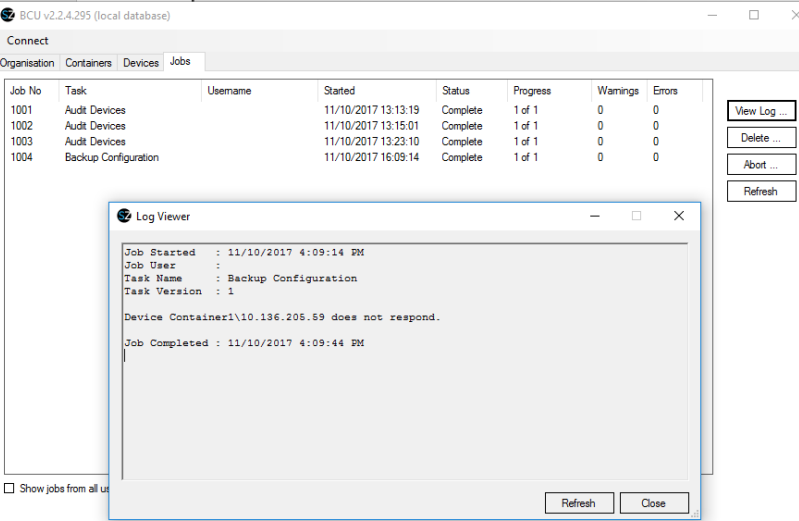
and they will be stored in the folder:

`<installation directory>\Bulk Configuration Utility\ConfigBackups\YYYY-MM\`

where YYYY = year, MM = month, DD = day, hh = hours, mm = minutes and ss = seconds.

The configuration data for a device is stored in its EEPROM (non-volatile) memory.

Step	Instruction		Result
1	Check the desired Gateways from the device tree, select Backup Configuration , and click Open .	 <p>The screenshot shows the 'BCU v2.2.4.295 (local database)' application window. On the left, a tree view shows 'Organisation' expanded to 'BSAJ-EPA126 (192.168.0.253)'. On the right, a task list is displayed under the heading 'Click a category and then a task ...'. The 'Backup Configuration' option is highlighted in blue. Other options include 'Replicate Entire Configuration', 'Advanced Configuration Replication', 'Restore Configuration', 'Trap Settings', 'Channel Settings', and 'Firmware Upgrades'. An 'Open ...' button is visible at the top right of the task list. At the bottom of the window, it shows 'Selected Master: <None>' and 'User: (Role: Administrator)'. A status bar at the bottom right indicates 'Total: 1'.</p>	The desired Gateways are selected for configuration backup. The Backup Configuration pane displays on the right.
2	Click Apply .	 <p>The screenshot shows the same BCU v2.2.4.295 application window. The 'Backup Configuration' pane is now open, showing a '<< Backup Configuration' header. A 'Log Viewer' window is overlaid on top, displaying the following log text: <pre> Job Started : 11/10/2017 3:00:52 PM Job User : Task Name : Backup Configuration Task Version : 1 Started 3:00 PM Device: BSAJ-EPA126 (192.168.0.253) Device: BSAJ-EPA126, Device Class: 1-1-1-1, ping: 1ms Uploading request.cfg to 192.168.0.253: Uploading 512 bytes of total 1057. Uploading 1024 bytes of total 1057. Uploading 1057 bytes of total 1057. Upload successfully finished. Checking Status: </pre> The 'Log Viewer' window has 'Refresh' and 'Close' buttons. Below the log viewer, the 'View Log' button is visible, along with '< Back', 'Set Master', and 'Apply' buttons. The status bar at the bottom shows 'Created Job: 1008' and 'Total: 1'. </p>	The backup of the selected Gateways' configurations initiates, and the Log Viewer shows the progress of the backup job.

Step	Instruction		Result
3	Click the Jobs tab and double-click the Backup job when it displays as complete.	 <p>The screenshot shows the BCU v2.2.4.295 (local database) interface. The 'Jobs' tab is active, displaying a table with columns: Job No, Task, Username, Started, Status, Progress, Warnings, and Errors. The table contains four rows of jobs, all with a status of 'Complete'. Job 1004, 'Backup Configuration', is selected. A 'Log Viewer' window is open over the table, showing the following log details: Job Started : 11/10/2017 4:09:14 PM, Job User : , Task Name : Backup Configuration, Task Version : 1, Device Container1\10.136.205.59 does not respond., and Job Completed : 11/10/2017 4:09:44 PM. The Log Viewer window has 'Refresh' and 'Close' buttons.</p>	The results for this job display. When completed successfully, the selected Gateways are backed up.
End of Steps			

Restore Configuration

This task creates a job to restore the configuration of a single Gateway. Before starting this procedure in the BCU, copy the contents of a selected backup file into the EEPROM of the selected device.

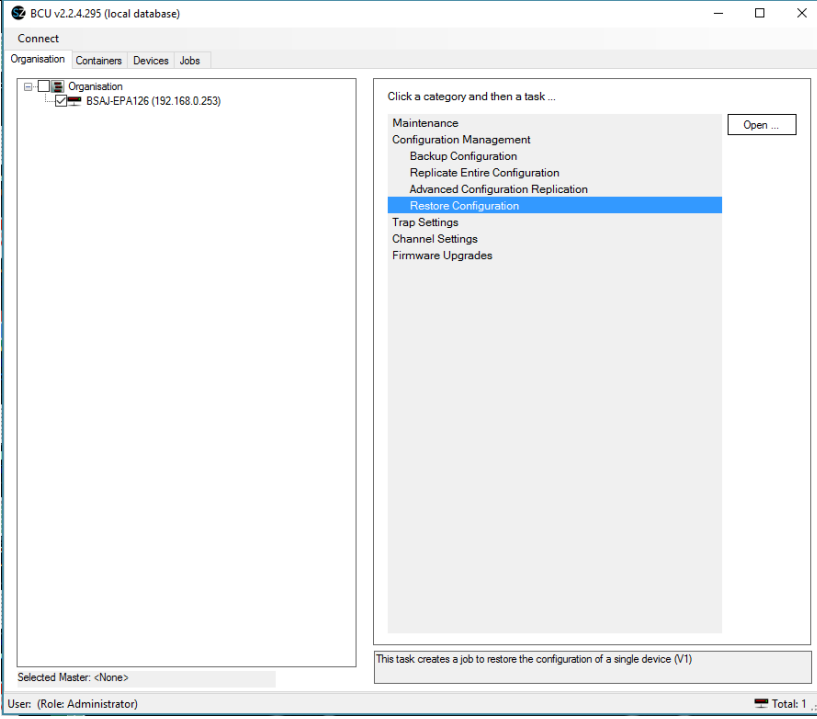
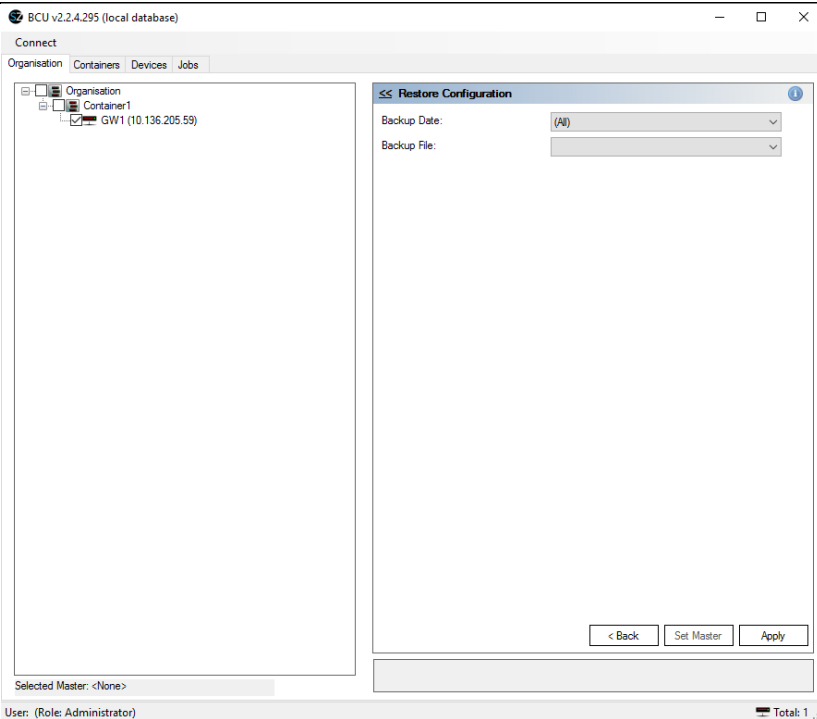
Backup file names have the form:

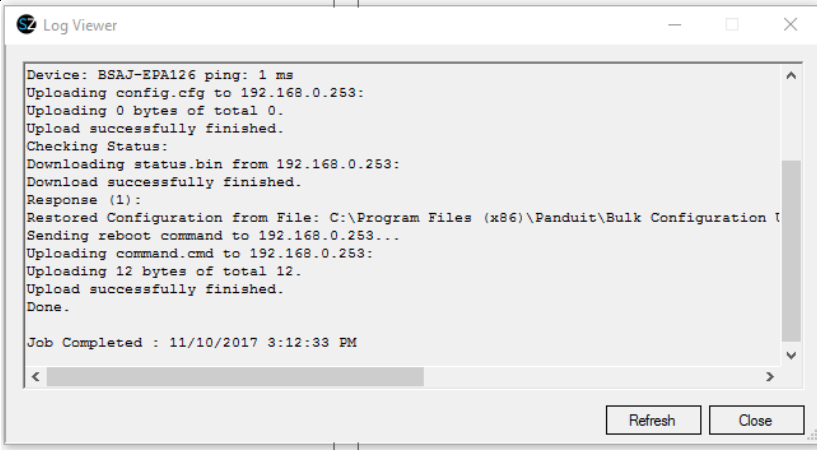
<mac address>-<device name>-YYYYMMDDhhmmss.cfg

where YYYY = year, MM = month, DD = day, hh = hours, mm = minutes, and ss = seconds

The backup file is stored in the folder:

<installation directory>\Bulk Configuration Utility\ConfigBackups\YYYY-MM\

Step	Instruction		Result
1	Check the desired Gateways from the device tree, select Restore Configuration , and click Open .	 <p>The screenshot shows the 'Connect' window with a tree view on the left containing 'Organisation' and 'BSAJ-EPA126 (192.168.0.253)'. On the right, a task list is displayed with 'Restore Configuration' highlighted in blue. Other tasks include Maintenance, Configuration Management, Backup Configuration, Replicate Entire Configuration, Advanced Configuration Replication, Trap Settings, Channel Settings, and Firmware Upgrades. A status bar at the bottom indicates 'Selected Master: <None>' and 'User: (Role: Administrator) Total: 1'.</p>	The desired Gateways are selected for configuration restoration. The Restore Configuration pane displays on the right.
2	Choose the backup date and the backup file to use from the drop-down list, and then click Apply .	 <p>The screenshot shows the 'Restore Configuration' dialog box open. It features two dropdown menus: 'Backup Date' with '(All)' selected and 'Backup File' with an empty selection. At the bottom of the dialog are three buttons: '< Back', 'Set Master', and 'Apply'. The background tree view shows 'Organisation', 'Container1', and 'GW1 (10.136.205.59)'. The status bar at the bottom shows 'Selected Master: <None>' and 'User: (Role: Administrator) Total: 1'.</p>	The backup file is selected for use in restoring a Gateway's configuration, and the Restore Configuration job initiates for the selected Gateway.

Step	Instruction		Result
3	Click the Jobs tab and double-click the Restore job when it displays as complete.	 <pre> Device: BSAJ-EPA126 ping: 1 ms Uploading config.cfg to 192.168.0.253: Uploading 0 bytes of total 0. Upload successfully finished. Checking Status: Downloading status.bin from 192.168.0.253: Download successfully finished. Response (1): Restored Configuration from File: C:\Program Files (x86)\Panduit\Bulk Configuration T Sending reboot command to 192.168.0.253... Uploading command.cmd to 192.168.0.253: Uploading 12 bytes of total 12. Upload successfully finished. Done. Job Completed : 11/10/2017 3:12:33 PM </pre>	<p>The results for this task display.</p> <p>Note: The Gateway reboots once the configuration is restored.</p>
End of Steps			

End State

Gateway configurations are replicated, backed up, and restored when necessary.