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# **OMCI WEB UI Tool How To**

## **For BCM968xx DSL Linux**

### **Version 1.0**

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# *OMCI WEB UI Tool How To*

## REVISION HISTORY

<i>Revision Number</i>	<i>Date</i>	<i>Change Description</i>
V1.0	04/07/2008	Initial Release.

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## 1.1 Introduction

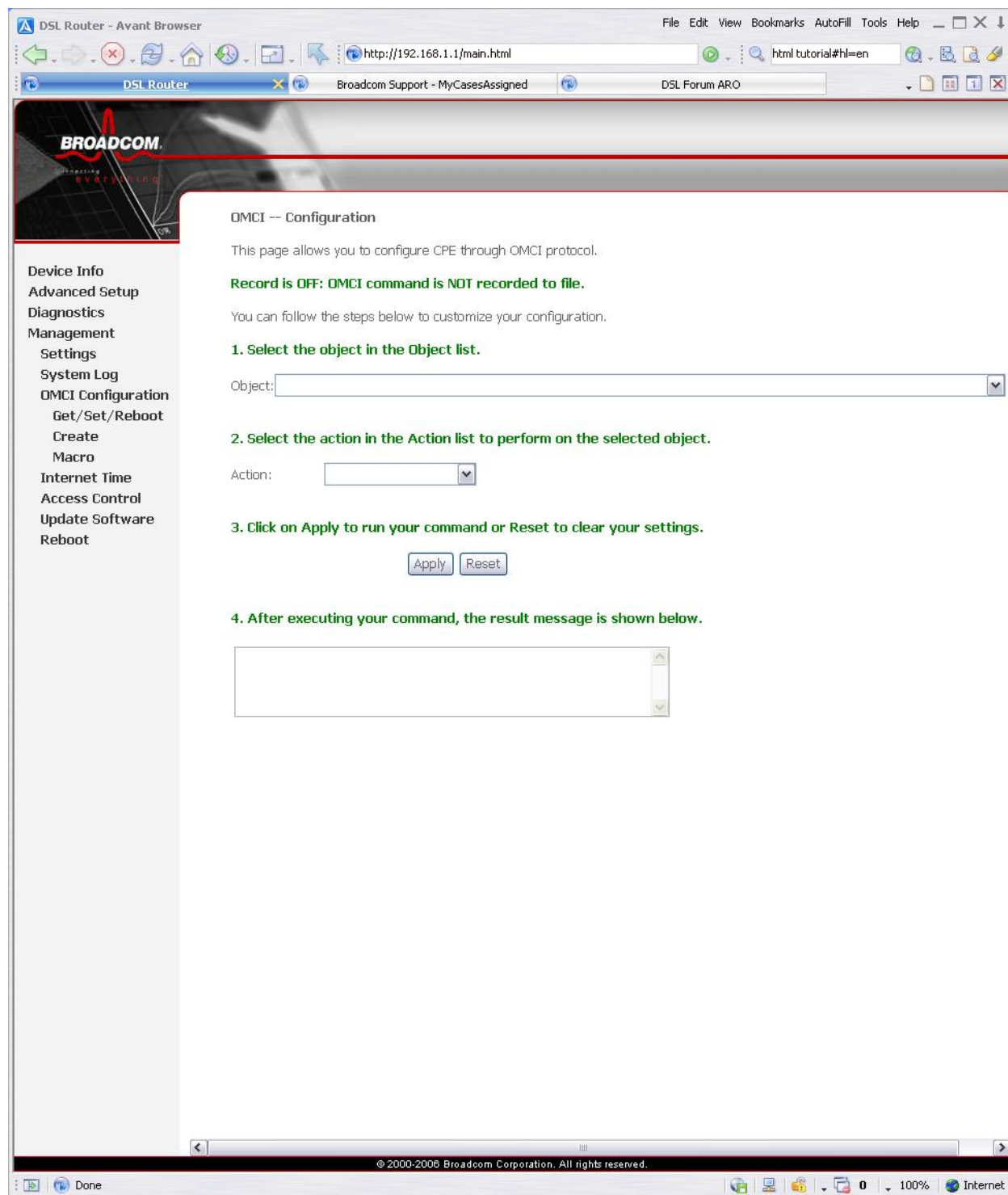
This document serves as an application note on the details of the WEB UI tool that can be used to configure ONT through OMCI commands and their management entities. This tool provides several add-on WEB UI pages to the WEB UI application that is supported in Linux releases of BCM968xx platforms. The add-on WEB UI pages display an intuitive interface that can be used to configure ONT with Get, Set, Create, and Reboot OMCI commands. Furthermore, with its macro feature, these commands can be recorded to either memory or host, then can be retrieved and executed later.

**This tool is tested with Internet Explorer browser only. It might not work correctly if it is used with different browser such as FireFox or Safari.**

## 1.2 Using OMCI WEB UI Tool

The OMCI WEB UI Tool can be used by clicking on “Management | OMCI Configuration” link. The OMCI WEB UI Tool provides the following WEB pages:

1. Get/Set/Reboot.
2. Create
3. Macro



### 1.3 Get/Set/Reboot

This WEB UI page allows you to generate either “Get”, “Set”, or “Reboot” OMCI commands. Click on “Management | OMCI Configuration | Get/Set/Reboot” link to display the following screen.

The screenshot shows a web browser window titled "DSL Router - Avant Browser" with the address bar displaying "http://192.168.1.1/main.html". The browser has several tabs open: "DSL Router", "Broadcom Support - MyCasesAssigned", and "DSL Forum ARO". The main content area is titled "OMCI -- Configuration" and includes a breadcrumb trail: "Management | OMCI Configuration | Get/Set/Reboot".

**OMCI -- Configuration**

This page allows you to configure CPE through OMCI protocol.

**Record is OFF: OMCI command is NOT recorded to file.**

You can follow the steps below to customize your configuration.

- 1. Select the object in the Object list.**  
Object:
- 2. Select the action in the Action list to perform on the selected object.**  
Action:
- 3. Click on Apply to run your command or Reset to clear your settings.**
- 4. After executing your command, the result message is shown below.**

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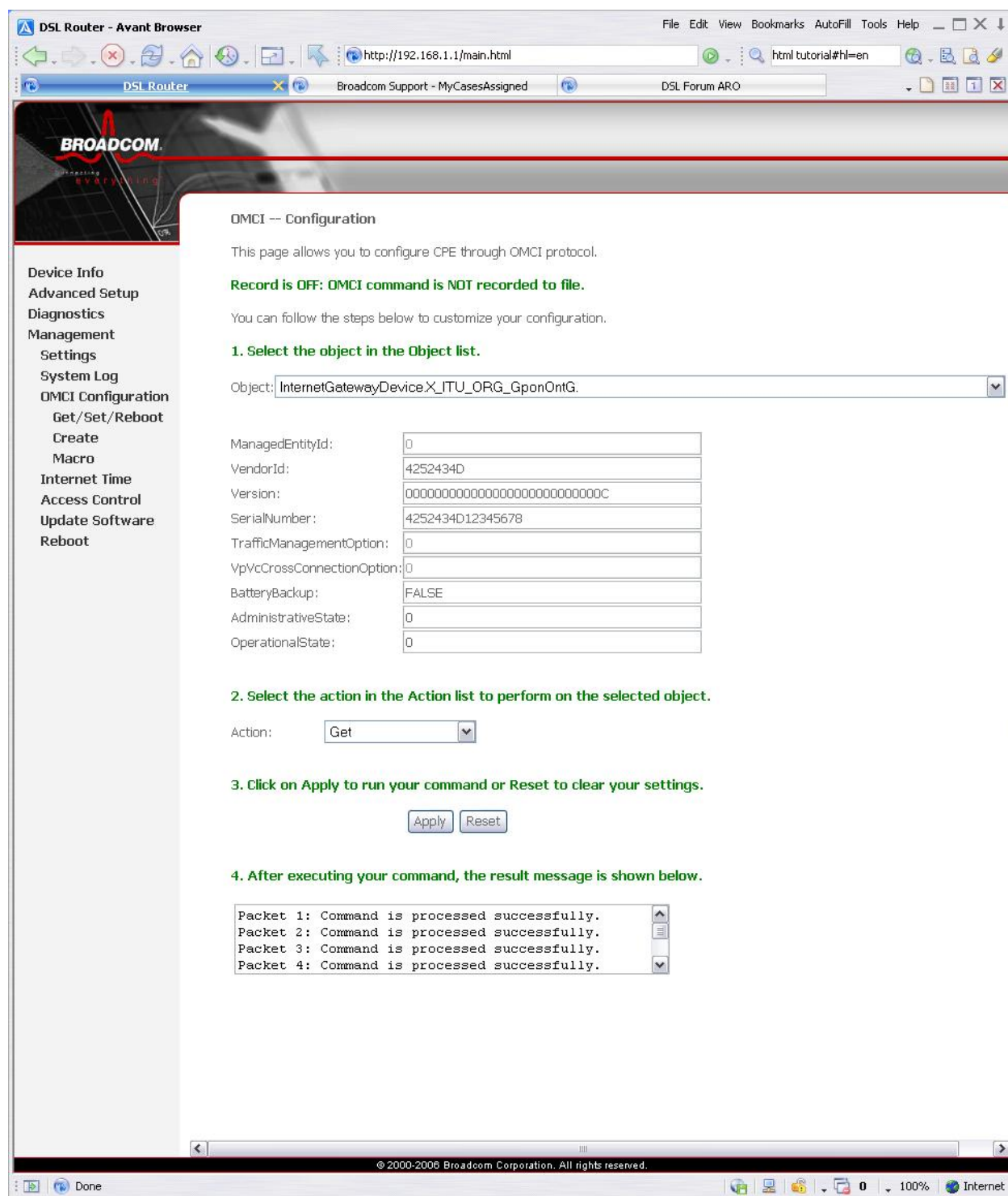
### 1.3.1 Get OMCI command

To generate “Get” OMCI command, you can follow the steps below:

1. Select the OMCI management entity in the Object list.
2. Select the “Get” action in the Action list.
3. Click on Apply to execute the “Get” OMCI command.
4. The result message is shown after executing the “Get” OMCI command.

OMCI WEB UI Tool will generate, and send one “Get” OMCI command per each attribute (parameter) in the management entity. If attributes are not writable then their values will be disabled and displayed as grey. Below is screen that shows the “Get” OMCI command is performed successfully.

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If OMCI daemon is not running then the “Get” command is failed, and error message is shown as in the following screen



DSL Router - Avant Browser

File Edit View Bookmarks AutoFill Tools Help

http://192.168.1.1/main.html

DSL Router Broadcom Support - MyCasesAssigned DSL Forum ARO

**BROADCOM**

Device Info  
Advanced Setup  
Diagnostics  
Management  
Settings  
System Log  
OMCI Configuration  
Get/Set/Reboot  
Create Macro  
Internet Time  
Access Control  
Update Software  
Reboot

### OMCI -- Configuration

This page allows you to configure CPE through OMCI protocol.

**Record is OFF: OMCI command is NOT recorded to file.**

You can follow the steps below to customize your configuration.

**1. Select the object in the Object list.**

Object:

ManagedEntityId:

VendorId:

Version:

SerialNumber:

TrafficManagementOption:

VpVcCrossConnectionOption:

BatteryBackup:

AdministrativeState:

OperationalState:

**2. Select the action in the Action list to perform on the selected object.**

Action:

**3. Click on Apply to run your command or Reset to clear your settings.**

**4. After executing your command, the result message is shown below.**

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Done 100% Internet

### 1.3.2 Set OMCI command

To generate “Set” OMCI command, you should perform “Get” on the management entity that you want to “Set” first, and follow the steps below:

1. Select the OMCI management entity in the Object list.
2. Modify value for each attribute that you want to change.
3. Select the “Set” action in the Action list.
4. Click on Apply to execute the “Set” OMCI command.
5. The result message is shown after executing the “Set” OMCI command.

OMCI WEB UI Tool will generate, and send one “Set” OMCI command per each writable attribute (parameter) in the management entity even the value of attribute is not changed. When “Set” OMCI command is performed successfully, the values of all attributes are clear. To display these values, you should perform “Get” OMCI command on the selected management entity again. Below is screen that shows the “Set” OMCI command before “Apply” button is clicked.

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DSL Router - Avant Browser

File Edit View Bookmarks AutoFill Tools Help

http://192.168.1.1/main.html

DSL Router Broadcom Support - MyCasesAssigned DSL Forum ARO

**BROADCOM**

Device Info  
Advanced Setup  
Diagnostics  
Management  
Settings  
System Log  
OMCI Configuration  
Get/Set/Reboot  
Create Macro  
Internet Time  
Access Control  
Update Software  
Reboot

### OMCI -- Configuration

This page allows you to configure CPE through OMCI protocol.

**Record is OFF: OMCI command is NOT recorded to file.**

You can follow the steps below to customize your configuration.

**1. Select the object in the Object list.**

Object: InternetGatewayDevice\_X\_ITU\_ORG\_GponAniG

ManagedEntityId:	32769
srIndication:	TRUE
TotalTcontNumber:	2
GemBlockLength:	48
PiggybackDbareporting:	0
WholeONUDbareporting:	1
SfThreshold:	6
SdThreshold:	10

**2. Select the action in the Action list to perform on the selected object.**

Action: Set

**3. Click on Apply to run your command or Reset to clear your settings.**

Apply Reset

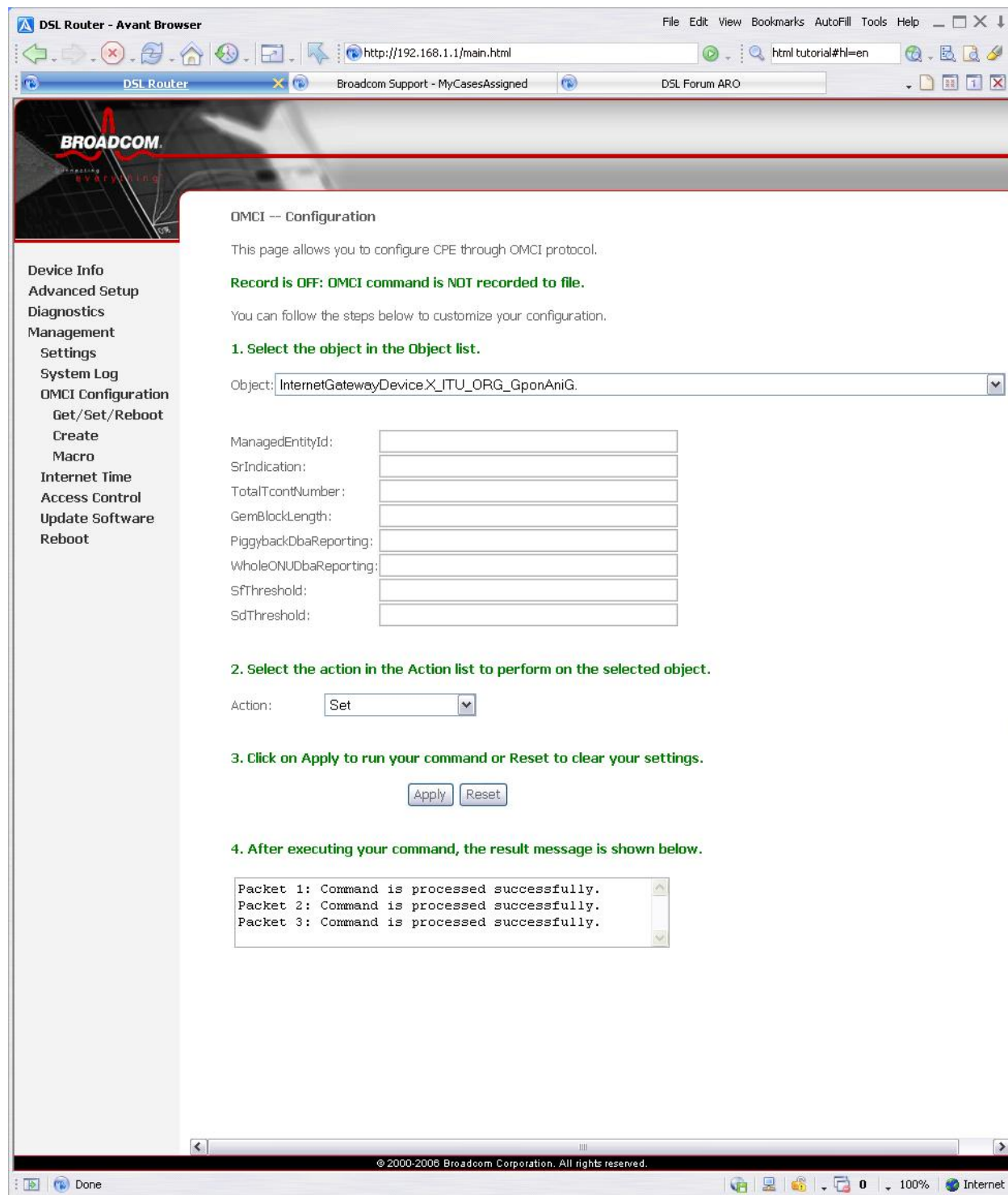
**4. After executing your command, the result message is shown below.**

```
Packet 1: Command is processed successfully.
Packet 2: Command is processed successfully.
Packet 3: Command is processed successfully.
Packet 4: Command is processed successfully.
```

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Done 100% Internet

Below is screen that shows the “Set” OMCI command is performed successfully.



### 1.3.3 Reboot OMCI command

To generate “Reboot” OMCI command, you can follow the steps below:

1. Select the “Reboot” action in the Action list.
2. Click on Apply to execute the “Reboot” OMCI command.
3. The result message is shown after executing the “Reboot” OMCI command.

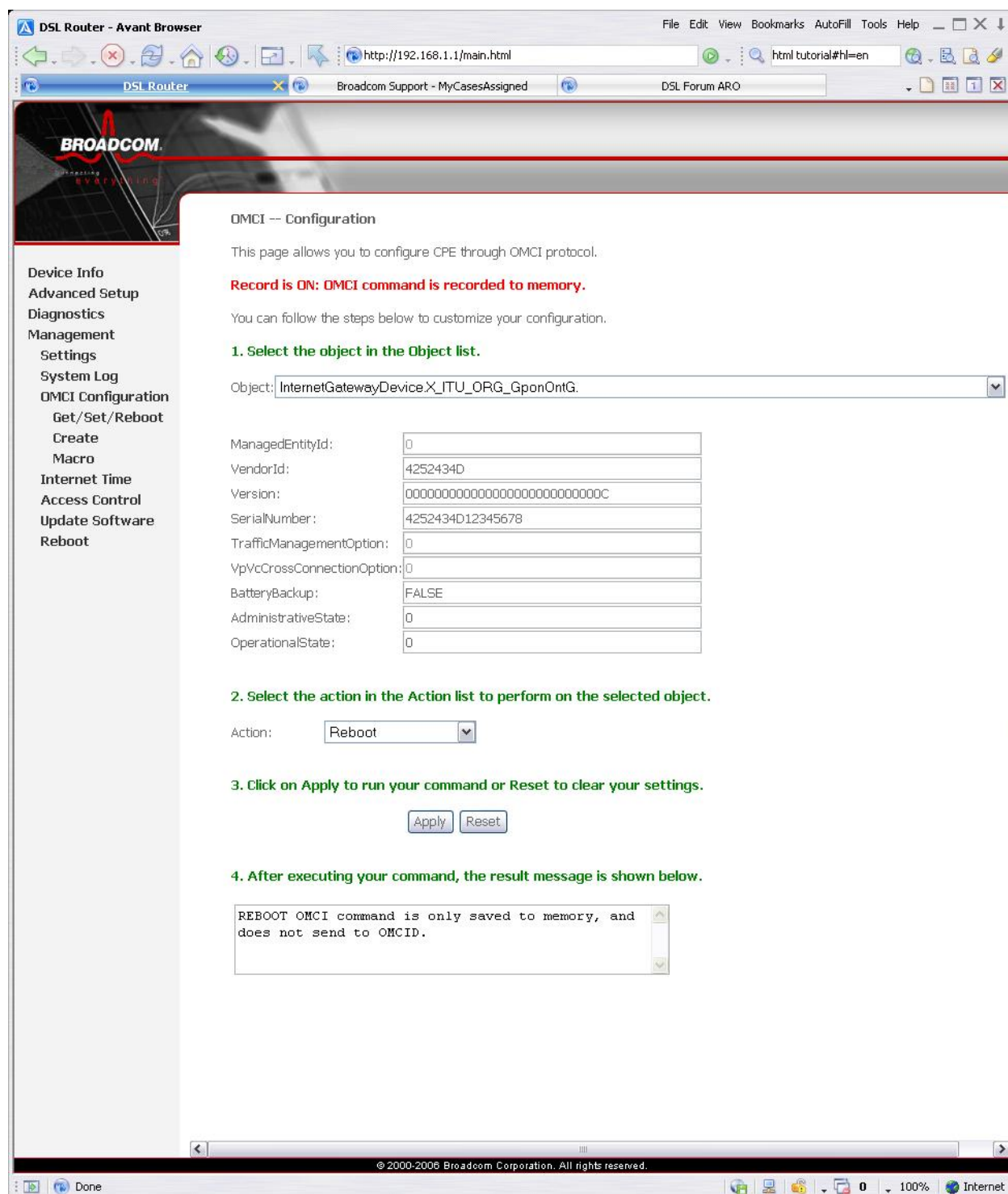
After receiving “Reboot” OMCI command from WEB UI, OMCI daemon will wait for 2 seconds before reboot the ONT.

Below is screen that shows the “Reboot” OMCI command is sending from WEB UI to OMCI daemon.

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The screenshot shows the 'DSL Router - Avant Browser' window. The address bar displays 'http://192.168.1.1/main.html'. The browser's tab bar shows 'DSL Router', 'Broadcom Support - MyCasesAssigned', and 'DSL Forum ARO'. The main content area is titled 'OMCI -- Configuration' and includes the following text: 'This page allows you to configure CPE through OMCI protocol.', 'Record is OFF: OMCI command is NOT recorded to file.', and 'You can follow the steps below to customize your configuration.' The steps are: 1. Select the object in the Object list. (The 'Object:' dropdown is empty.) 2. Select the action in the Action list to perform on the selected object. (The 'Action:' dropdown is set to 'Reboot'.) 3. Click on Apply to run your command or Reset to clear your settings. (Buttons for 'Apply' and 'Reset' are visible.) 4. After executing your command, the result message is shown below. (A text box displays: 'HTTPD is sending REBOOT OMCI commands to OMCID. Please wait...'). A left sidebar contains a navigation menu with items: Device Info, Advanced Setup, Diagnostics, Management, Settings, System Log, OMCI Configuration (highlighted), Get/Set/Reboot, Create Macro, Internet Time, Access Control, Update Software, and Reboot. The footer of the browser window shows '© 2000-2006 Broadcom Corporation. All rights reserved.' and the status bar indicates 'Opening page http://192.168.1.1/omcicfg.cmd?selObject=&selAction=reboot...'.

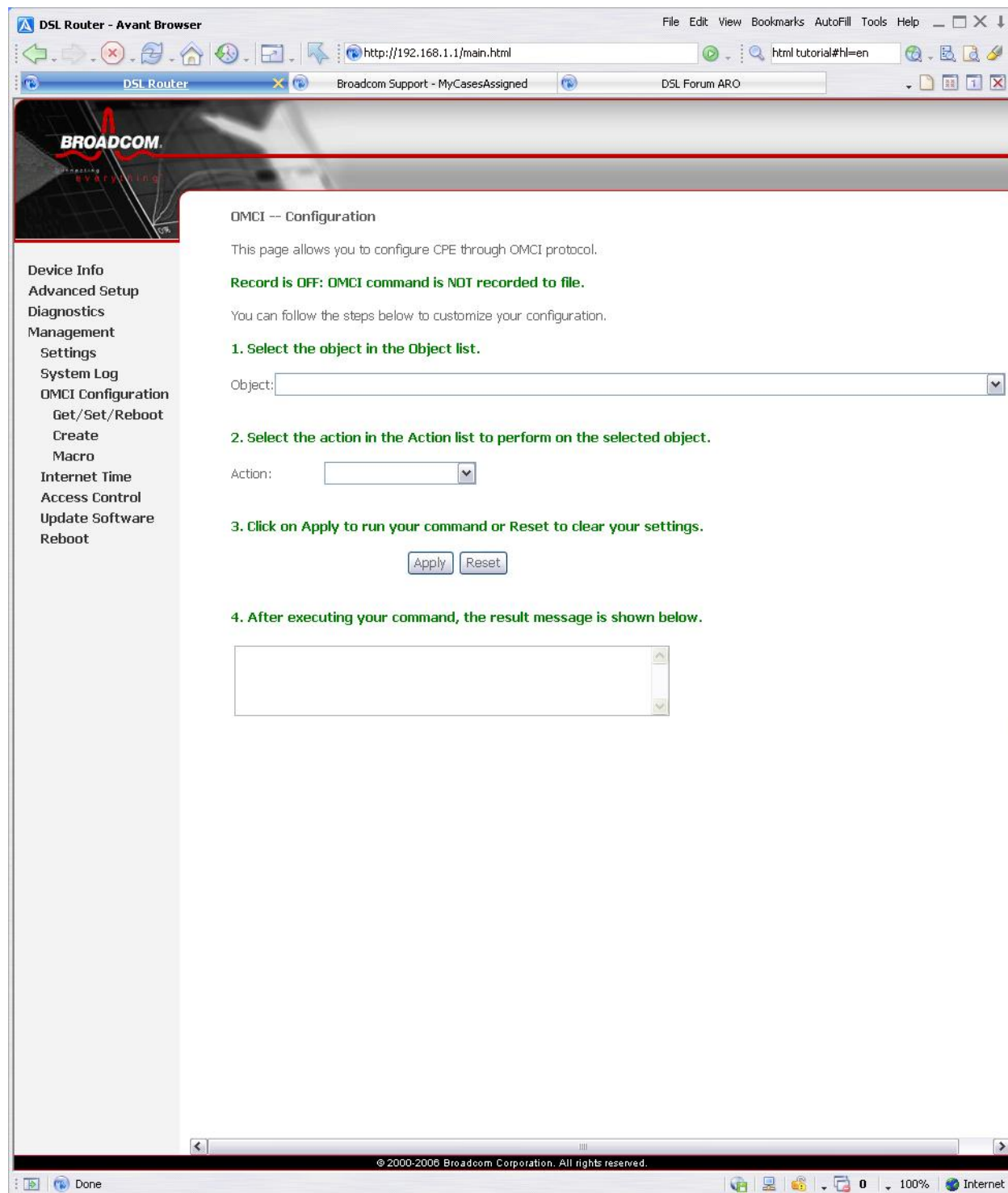
If Macro is ON, then “Reboot” OMCI command is only generated and saved to memory, but is not sent to OMCI daemon. Below is screen with the result message when “Reboot” OMCI command is generated and Macro is on.





### 1.3.4 Reset button

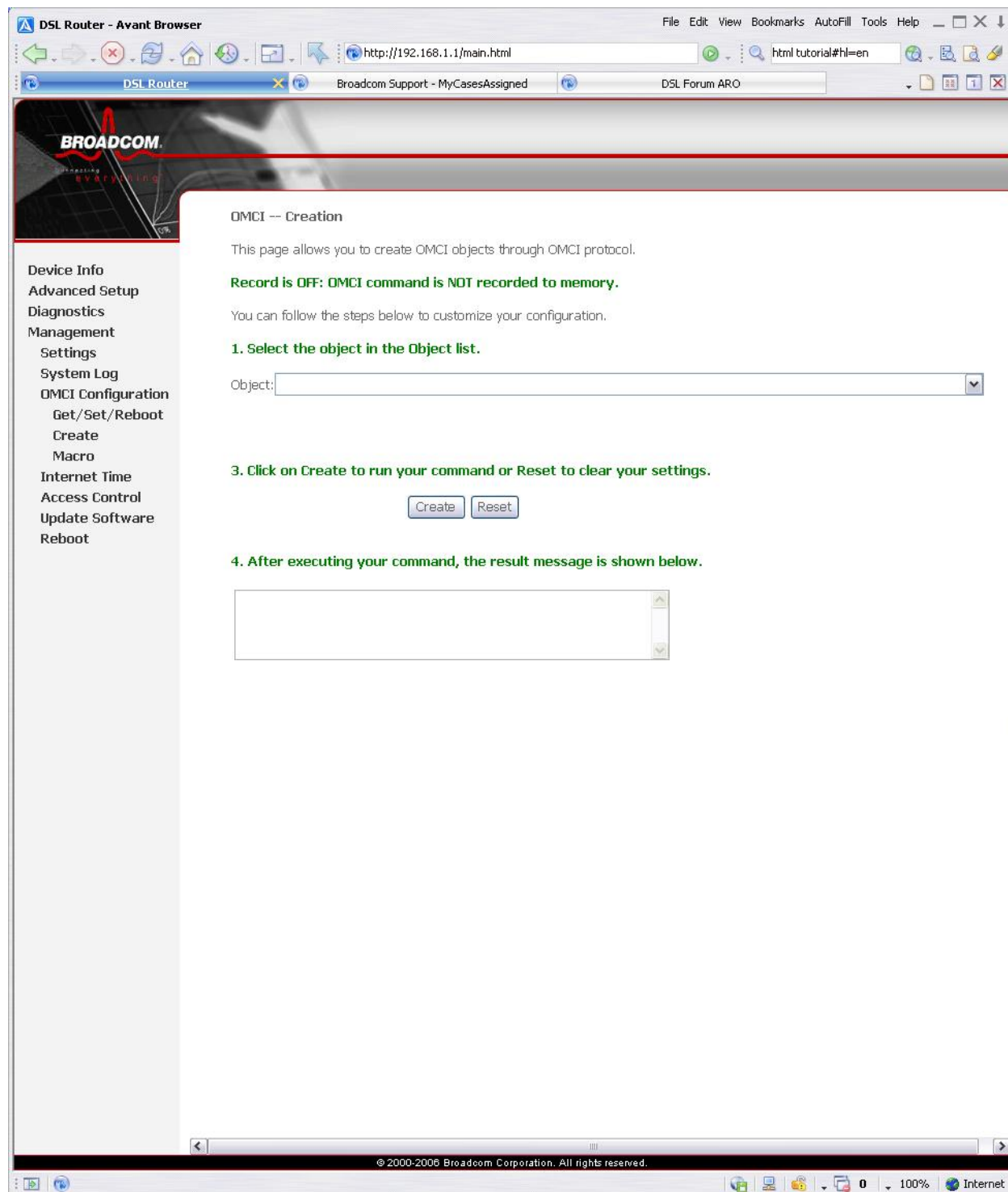
The Reset button next to Apply button is used to clear your previous settings. When this button is clicked, all of components in WEB UI are clear as show below.





## 1.4 Create

This WEB UI page allows you to generate “Create” OMCI commands. Click on “Management | OMCI Configuration | Create” link to display the following screen.



To generate "Create" OMCI command, you can follow the steps below:

1. Select the OMCI management entity in the Object list.
2. Assign value for each attribute that you wan to create.
3. Select the "Create" action in the Action list.
4. Click on Apply to execute the "Create" OMCI command.
5. The result message is shown after executing the "Create" OMCI command.

OMCI WEB UI Tool will generate, and send only one "Create" OMCI command per management entity. Same as "Set" command, after "Create" OMCI command is performed successfully, the values of all attributes are clear. To display these values, you should perform "Get" OMCI command on the corresponding management entity again. The instance ID of created management entity is not starting from 1, and is not continuous. For example, the first instance ID can be 3, and the second instance ID can be 6, and so on...

Below is screen that shows the "Create" OMCI command before "Create" button is clicked.

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**DSL Router - Avant Browser**

File Edit View Bookmarks AutoFill Tools Help

http://192.168.1.1/main.html

DSL Router Broadcom Support - MyCasesAssigned DSL Forum ARO

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Device Info  
Advanced Setup  
Diagnostics  
Management  
Settings  
System Log  
OMCI Configuration  
Get/Set/Reboot  
Create  
Macro  
Internet Time  
Access Control  
Update Software  
Reboot

**OMCI -- Creation**

This page allows you to create OMCI objects through OMCI protocol.

**Record is OFF: OMCI command is NOT recorded to file.**

You can follow the steps below to customize your configuration.

**1. Select the object in the Object list.**

Object:

ManagedEntityId:

MaximumGemPayloadSize:

**3. Click on Create to run your command or Reset to clear your settings.**

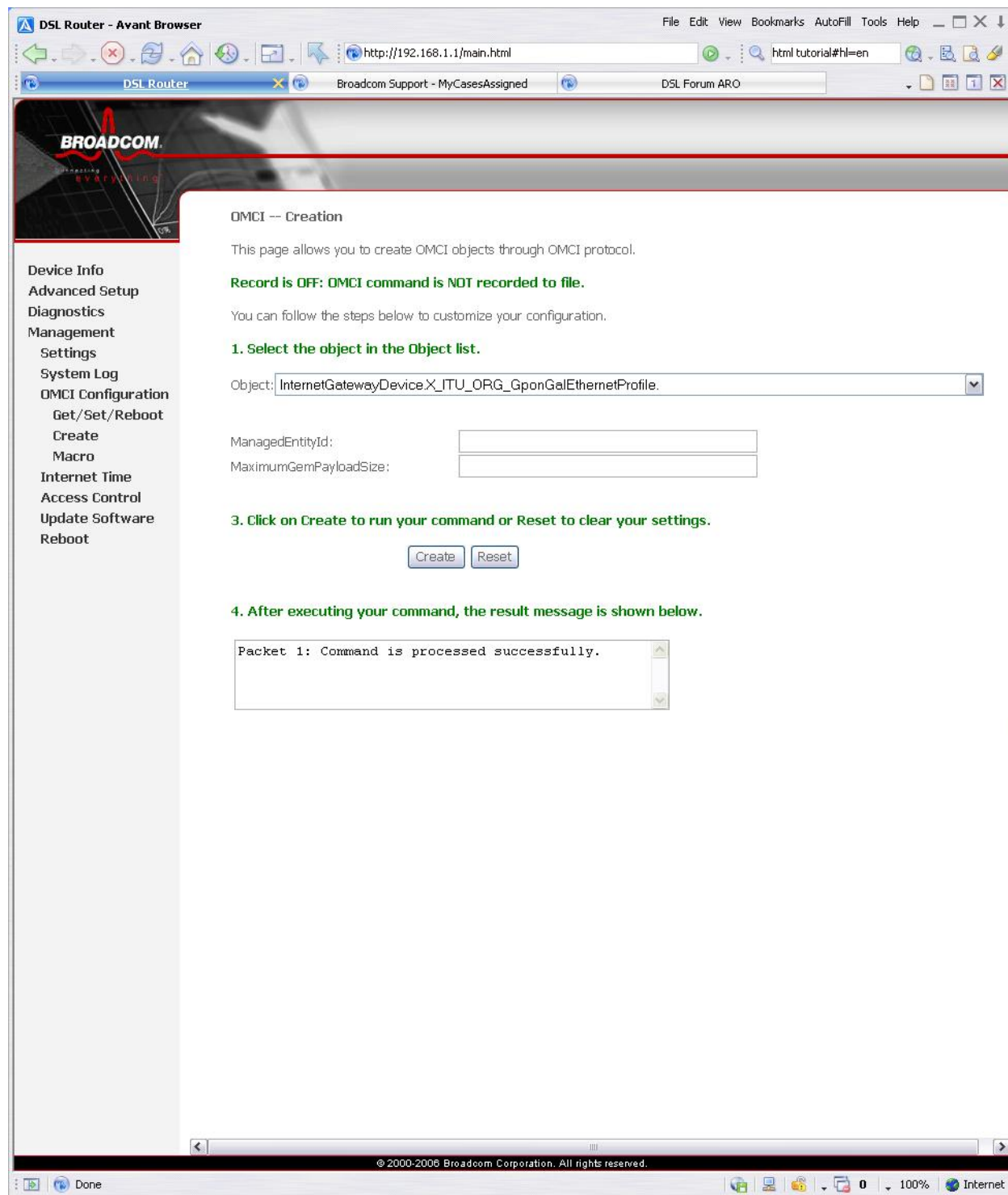
**4. After executing your command, the result message is shown below.**

Packet 1: Command is processed successfully.

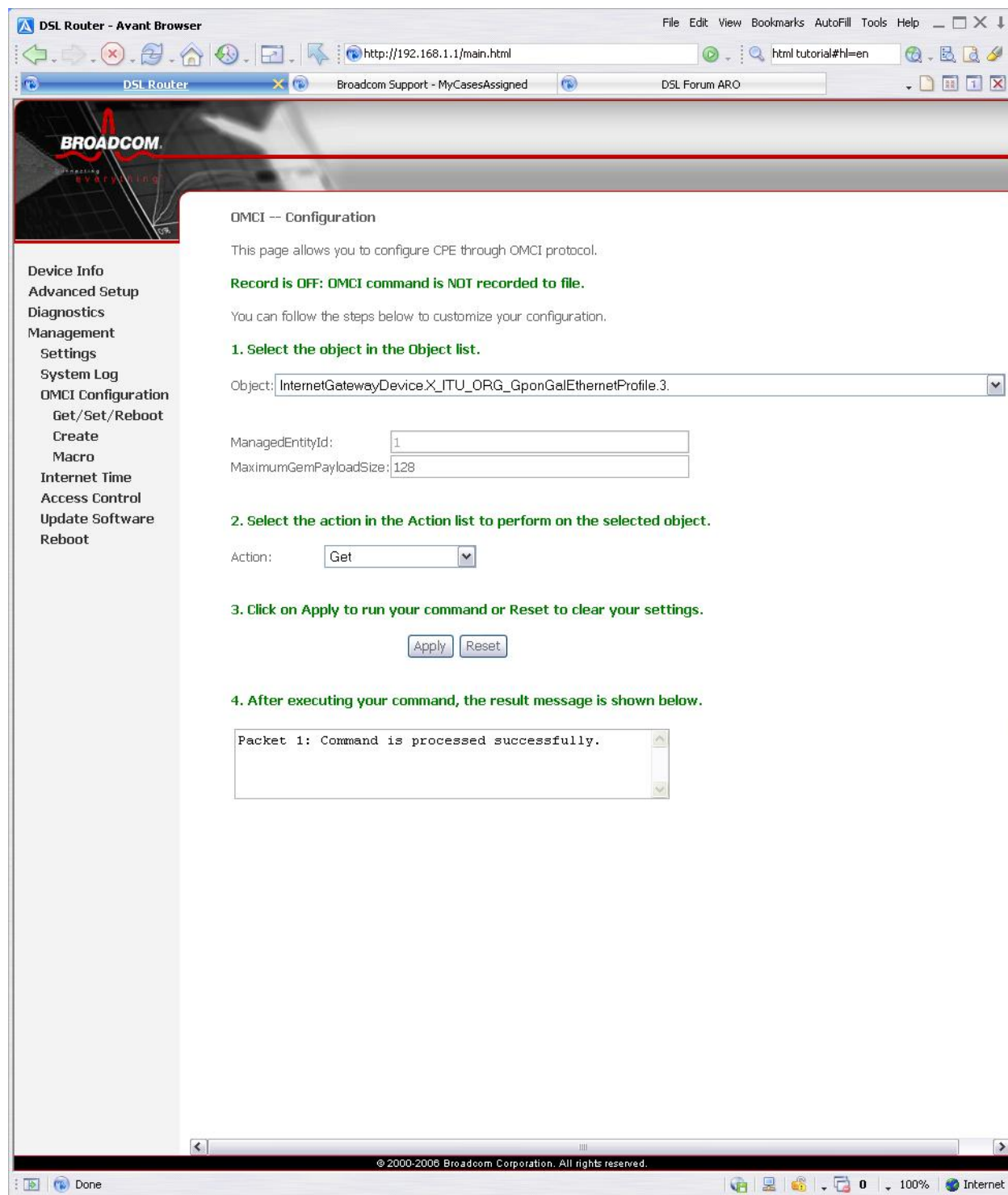
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Done 100% Internet

Below is screen that shows the “Create” OMCI command is performed successfully.

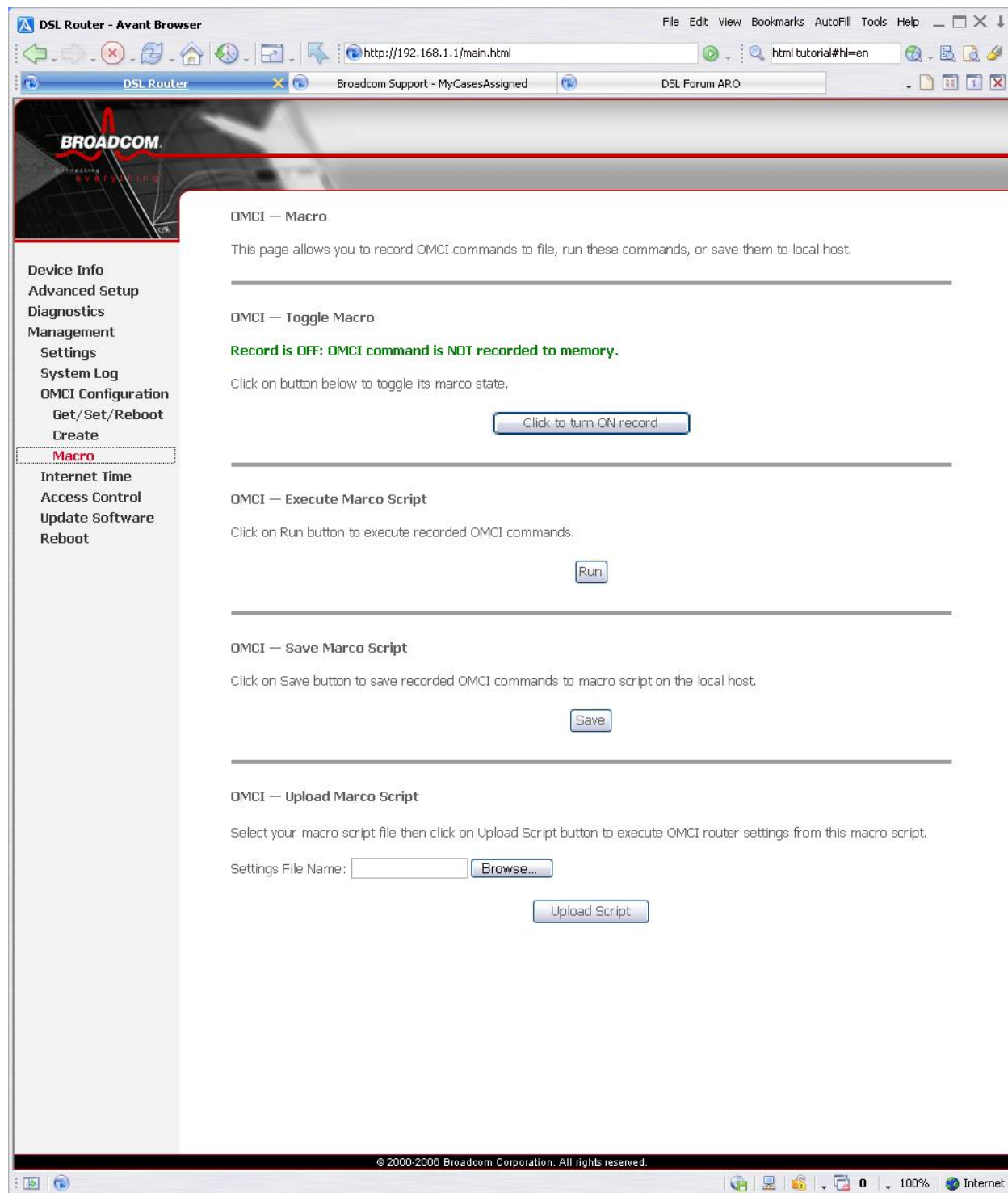


You can perform “Get” on the corresponding management entity to verify that the object is created successfully. Below is screen that shows this action.



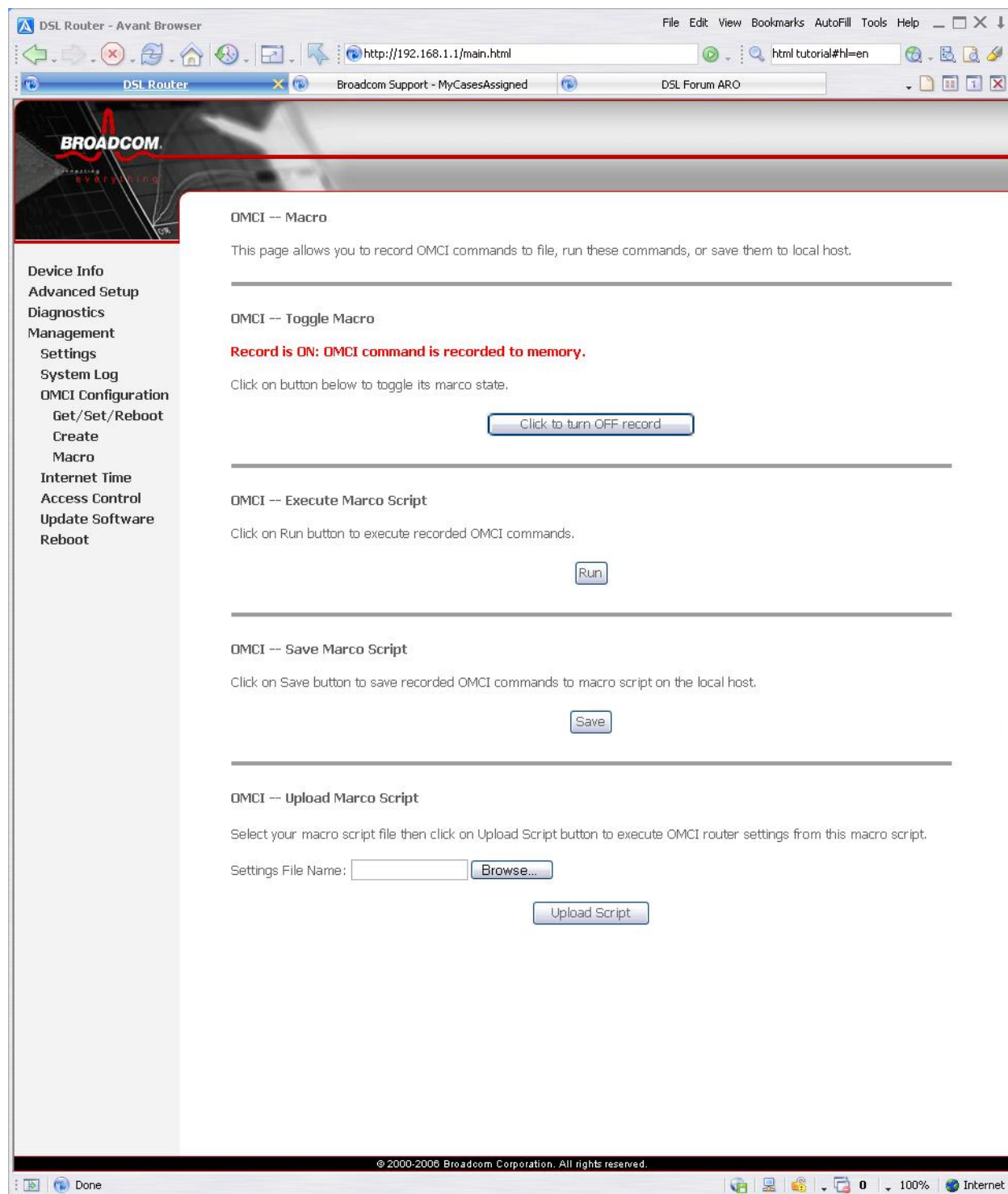
## 1.5 Macro

This WEB UI page allows you to record OMCI commands to memory, or save them to host. Then you can run these OMCI commands either directly from memory or upload them from host. To access these features, you should click on “Management | OMCI Configuration | Macro” link to display the following screen.



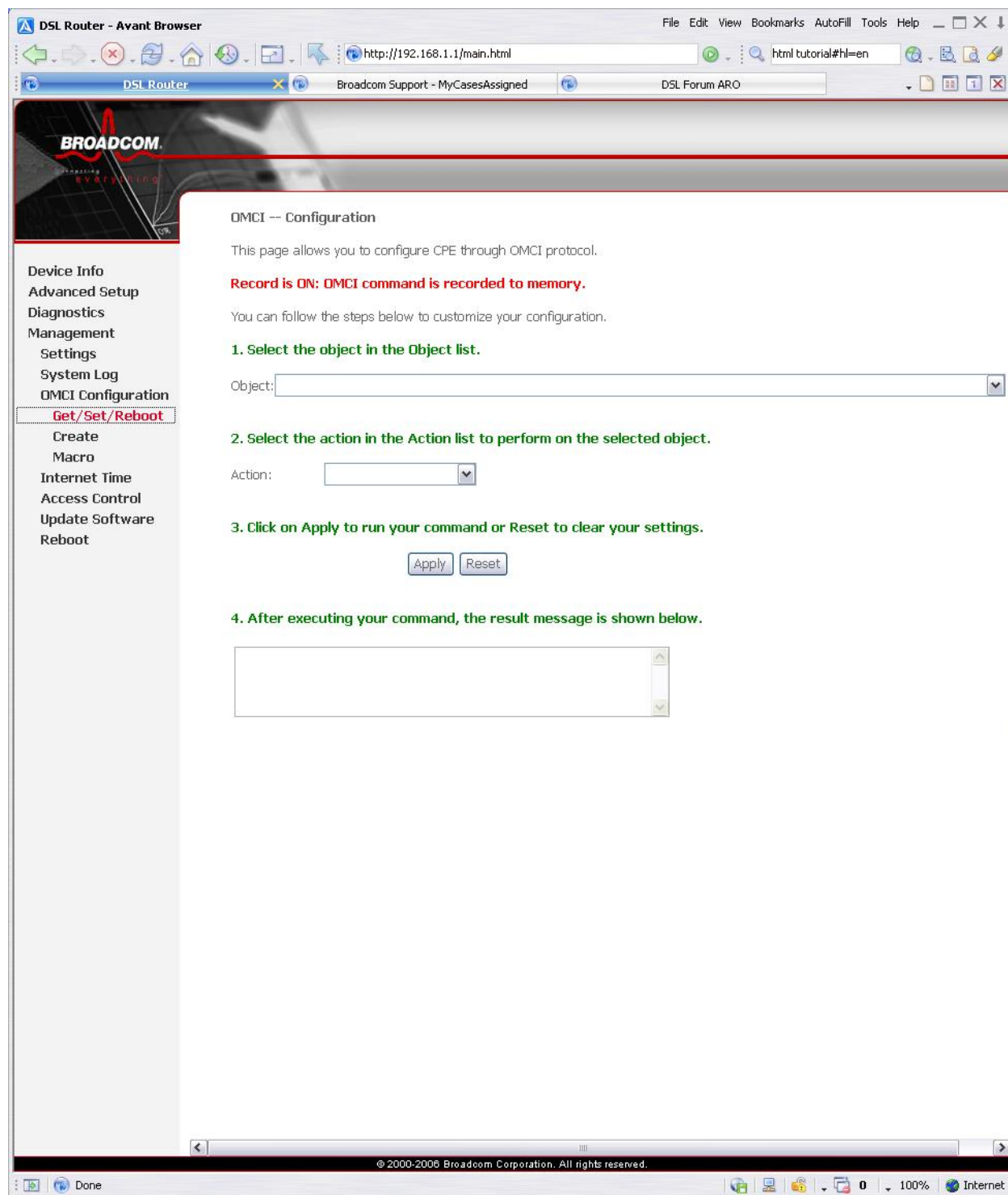
### 1.5.1 Toggle Macro

When ONT is started, Macro is off by default. Its state is described as "Record is OFF: OMCI command is NOT recorded to memory" in green color. To toggle its state from off to on, click on "Click to turn ON record" button. After this toggle button is clicked, its state is changed as show below.





The macro state is also displayed on “Get/Set/Reboot” and “Create” WEB pages. Below is “Get/Set/Reboot” screen in which macro state is “Record is ON: OMCI commands is recorded to memory” in red color. In this state, all OMCI commands (except “Reboot”) are not only generated and sent to OMCI daemon, but also saved to memory.





### 1.5.2 Execute Macro

After saving OMCI commands to memory by turning on macro state and performing OMCI commands, you can execute these commands again by clicking on “Run” button. The confirm dialog should be displayed (it’s not in this release) before these commands are executed.

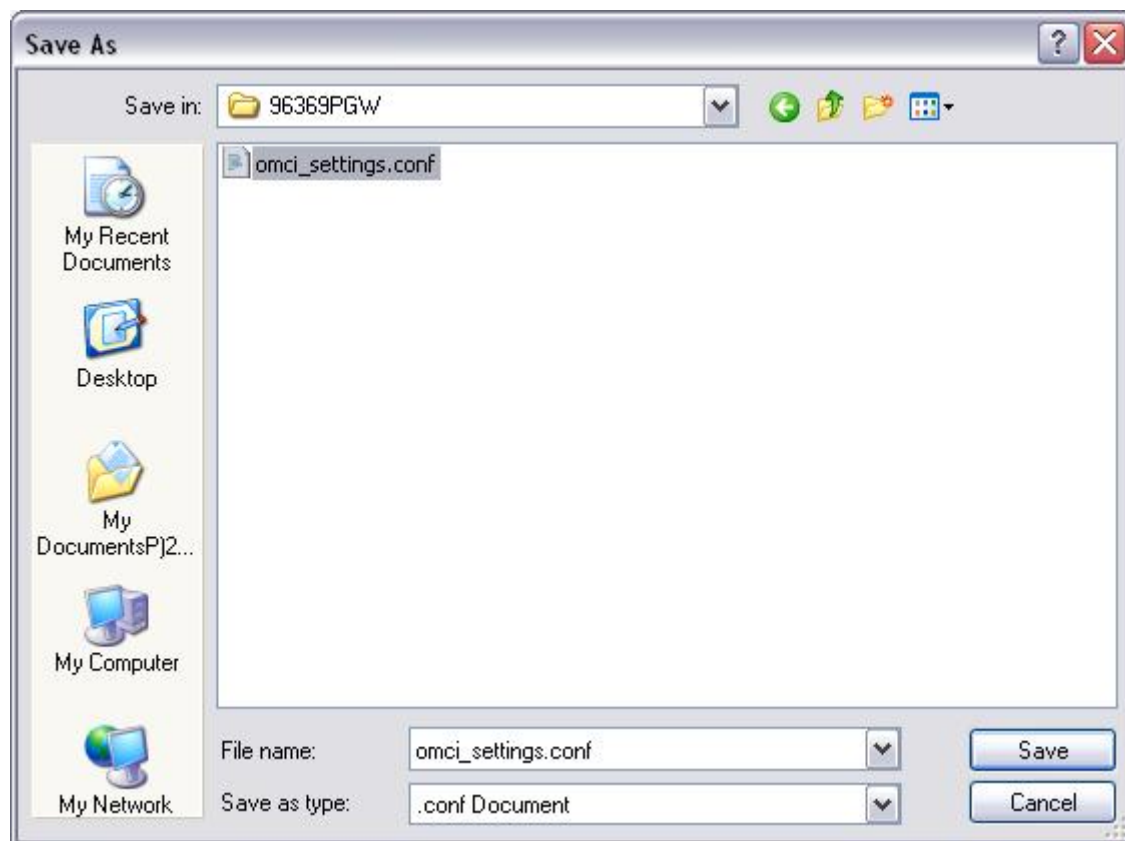
### 1.5.3 Save Macro

You can save OMCI commands that are in memory to host by clicking on “Save” button. If you’re using Internet Explorer browser, the following dialog should be displayed.



Click on the “Save” button to display the following dialog

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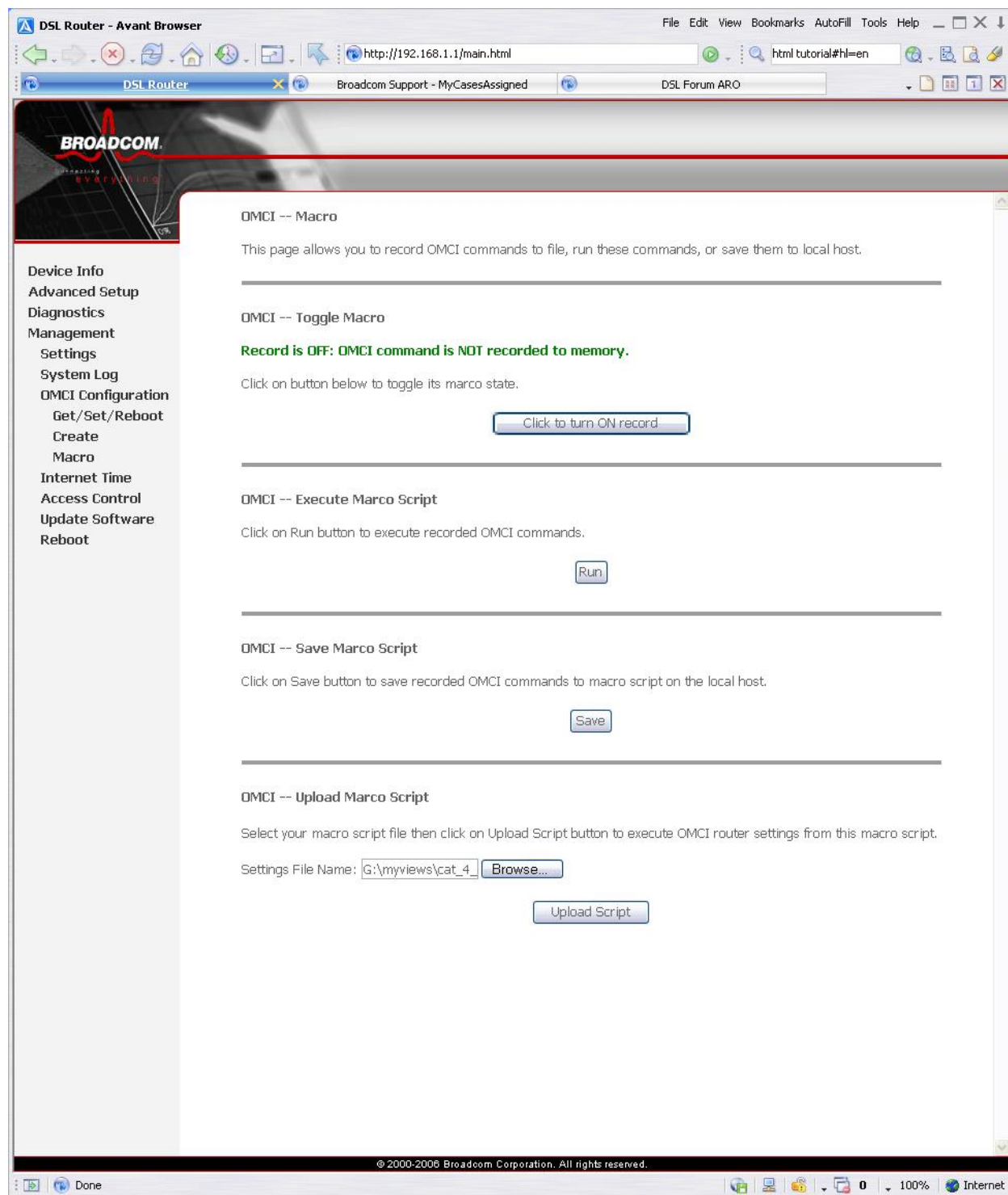
Assign the file name, and click on "Save" button to store OMCI commands to the file in host machine.

#### 1.5.4 Upload Macro

You can upload file that contains OMCI commands from the host machine to ONT memory and execute them by performing the following steps:

1. Click on the Browse button to select the file on the host machine.
2. Click on "Upload Script" button to upload OMCI commands in the file to ONT memory and execute them.

Below is the screen that shows the above steps:



## 1.6 Conclusion

OMCI WEB UI Tool can help user to test the ONT configuration through OMCI commands and its management entities. With this tool, OMCI commands are generated easily, and executed right away. These commands also can be stored and retrieved for execution later. Furthermore, the tool provided only the available management entities for Get, Set, or Create so that user will not make any mistake in generating any OMCI commands.

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