



## Configuring Walled Gardens

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BBSM enables you to define free access to specific websites. This subset of the Internet that unauthenticated BBSM end users can access is called a *walled garden*. These walled gardens enable you to increase revenue by marketing various services to your guests.

The following are typical walled garden links:

- Local weather and attractions
- Online concierge and room services
- Hotel chain corporate or loyalty program portals
- Vendor services, such as car rental agencies

In BBSM, a URL, a network IP address, and subnet mask define each free-access site.

Walled gardens are configured per server so all sites share the same walled gardens. However, end users normally access walled garden sites through links on the Connect page. If you want some ports to have access to walled garden sites while other ports do not, then create different Connect pages for the applicable ports.

From the BBSM perspective, walled gardens open up filters from the internal network (client network) to the external network (Internet) so a user on the internal network can access services on the external network without authenticating to BBSM, hence providing free access to specific sites on the external network that are set up on the walled garden web page.

Setting up walled gardens is a two-step process.

- The first step is to set up the filter entry, which is entered on the Walled Garden web page in WEBconfig. Three pieces of information are needed:
  - Full domain name—You enter the domain name of the walled garden website, such as `www.cisco.com`, in this field.

**Note** This domain name is used when a client's browser is configured to use a web proxy. In this case, the packets that BBSM sees have an unresolved destination address (the proxy server does the resolution). For this reason, BBSM compares the destination host name in the packet to the destination host name configured in the walled garden.
  - IP address—You enter the IP address (or addresses) of the site (or sites) to be accessed for free.
  - Subnet mask—You enter the subnet mask. In most cases, this IP address should be quadruple 255s (`255.255.255.255`), which limits access only to the IP address specified above. Any attempts by the client to redirect to another IP address forces BBSM to display the appropriate access page.



**Note** You can enter a less restrictive mask for an entire subnet block.

- Typically, the second step is to place links on the Connect page that refer to the sites entered on the Walled Garden web page. Your web developer can add these links for you.

Sometimes the IP address assigned to a domain changes. In this case, you will need to modify your walled garden settings:

- Update the walled garden page in WEBconfig with the new IP address.
- In your Connect page, replace any references to the old IP address with the new IP address. (Normally, you would use domain names in the HTML code in your web page so this may not apply.)

Follow this procedure to establish the path for each walled garden site by using the Walled Garden web page in WEBconfig and to refer to these sites from the Connect page, which is the typical step after configuring your web pages.

**Step 1** From the Dashboard, click **WEBconfig**. The BBSM Server Settings web page appears.

**Step 2** In the NavBar, click the **Walled Garden** link. The Walled Garden web page appears. (See [Figure 19-1](#).)

**Figure 19-1** Walled Garden Web Page

The screenshot shows the 'Walled Garden' configuration page in the Building Broadband Service Manager WEBconfig interface. The page has a sidebar on the left with various navigation options, including 'Walled Garden' which is currently selected. The main content area features a Cisco Systems logo and a title 'Walled Garden'. Below the logo is a form with three input fields: 'Full Domain Name' (containing 'www.cisco.com'), 'IP Address' (containing '192.255.255.255'), and 'Subnet Mask' (containing '192.255.255.254'). To the right of the form is a yellow callout box with the following text:

**To add sites to your walled garden:**  
 1. Click New.  
 2. Enter data in all 3 fields  
 3. Click Save.

**Full Domain Name:**  
 Enter the domain name of the walled garden site, such as www.mysite.com.

**IP Address and Subnet Mask:**  
 To gain access to only one site, enter the IP address of the domain name given and the subnet mask 255.255.255.255.

To gain access to a number of sites, enter the network address and subnet mask, such as 255.255.255.0.

At the bottom of the form are buttons for 'New', '<<', '<', '>', '>>', 'Request', 'Save', and 'Delete'.

**Step 3** Configure the Walled Garden options based on the information shown in [Table 19-1](#) and click **Save**.

**Step 4** Use a client to open a browser and test access to your walled gardens. If the page looks incomplete, the walled garden website may be using several servers for page content. You must enter a domain name, IP address, and subnet mask for each of these servers.

- Step 5** Add the links to the walled garden pages to the Connect page. This is the typical next step after configuring your walled gardens. Your web developer can add these links for you. Cisco recommends using domain name URLs instead of IP addresses in the HTML code, as this is standard practice for web development.



**Note** If the IP address of your walled garden changes, you must re-enter the walled garden IP address in WEBconfig. You must do this even if the domain name has not changed.

**Table 19-1 Walled Garden Web Page Options**

Field	Description
Full Domain Name	Enter the domain name of the walled garden website; for example, www.cisco.com.
IP Address	<b>Defining a Walled Garden on a Server</b>
Subnet Mask	<p>To define a walled garden on a server, enter the domain name's IP address and a subnet mask of 255.255.255.255. For example, for www.cisco.com, enter the following:</p> <ul style="list-style-type: none"> <li>IP address = 198.133.219.25</li> <li>Subnet mask = 255.255.255.255</li> </ul> <p><b>Defining a Walled Garden on a Subnet</b></p> <p>To define a walled garden on a subnet, you can enter the IP address for each site in the walled garden individually as above or you can enter the subnet's IP address and its subnet mask. For example, all of the following IP addresses are part of the 198.133.219.x subnet:</p> <ul style="list-style-type: none"> <li>www.cisco.com = 198.133.219.25:</li> <li>business.cisco.com = 198.133.219.124</li> <li>newsroom.cisco.com = 198.133.219.119</li> </ul> <p>You can incorporate these sites into a walled garden with just one subnet IP address and its subnet mask:</p> <ul style="list-style-type: none"> <li>IP address = 192.133.219.0</li> <li>Subnet mask = 255.255.255.0</li> </ul> <p>The x.x.x.0 address defines the walled garden as a subnet, not just an individual IP address. This subnet includes the range of IP addresses from 198.133.219.1 to 198.133.219.255. (Different subnet masks include different address ranges.)</p>
<b>Buttons</b>	
New	Adds a new walled garden site. Text fields on the page are cleared so that new data can be entered.
Requery	Refreshes the web page (click before saving changes).
Save	Saves the changes made to the web page.
Delete	Deletes this website from BBSM.

