# Access Policy Manager® Tech Note for BIG-IP® Edge Portal™ App for Android

Version 1.0.2

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This document was published on July 26, 2013.

### Publication Number

MAN-0479-00

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# Acknowledgments

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This product includes software developed by Manuel Bouyer.

This product includes software developed by Paul Richards.

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This product includes software developed by the Computer Systems Engineering Group at the Lawrence Berkeley Laboratory.

This product includes software developed by Christopher G. Demetriou for the NetBSD Project.

This product includes software developed by Adam Glass.

This product includes software developed by Christian E. Hopps.

This product includes software developed by Dean Huxley.

This product includes software developed by John Kohl.

This product includes software developed by Paul Kranenburg.

This product includes software developed by Terrence R. Lambert.

This product includes software developed by Philip A. Nelson.

This product includes software developed by Herb Peyerl.

This product includes software developed by Jochen Pohl for the NetBSD Project.

This product includes software developed by Chris Provenzano.

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# Chapter 1

# What is Edge Portal?

The BIG-IP® Edge Portal™ app streamlines access to portal access web sites and applications that reside behind a BIG-IP ® Access Policy Manager™. Using the BIG-IP® Edge Portal™ app, users can access internal web pages and web applications securely, as allowed by the BIG-IP ® Access Policy Manager™ Portal Access configuration.

For information on how to use the BIG-IP® Edge Portal™ App, refer to the online user guide in the app.

Edge Portal app features include:

- Username and password authentication
- Passcode lock enforced on the device
- Client certificate support
- Saving credentials and sessions
- Saving local bookmarks and favorites
- Accessing bookmarks with keywords
- Embedded web viewer
- Display of all file types supported by the device's operating system

# Chapter 2

# BIG-IP Edge Portal user-agent string

BIG-IP® Edge Portal sends version information in the user-agent string.

BIG-IP® Edge Portal™ sends Edge Portal version information, along with browser information, in the user-agent string. The following are examples of user-agent strings for Edge Portal. You can use this version information, which is stored in the session variable *session.user.agent*, to make policy decisions.

| Device OS | Example user-agent string |
|---|---|
| Android | `Mozilla/5.0 (Linux; U; Android 2.2; en-us; SGH-T849 Build/FROYO) AppleWebKit/533.1 (KHTML, like Gecko) Version/4.0 Mobile Safari/533.1 EdgePortal/1.0.0` |
| iOS | `Mozilla/5.0 (iPad; U; CPU OS 3_2_2 like Mac OS X; en-us) AppleWebKit/531.21.10 (KHTML, like Gecko) Mobile/7B500 EdgePortal/1.0.1` |

# Chapter 3

# Task summary for Edge Portal configuration

To set up this configuration, perform the procedures in the task list.

Task List

## Running a setup wizard to support BIG-IP Edge Portal on Access Policy Manager 10

Running the web application setup wizard for remote access quickly sets up an access policy and a virtual server for you.

1. Follow the instructions in the wizard to create your access policy and virtual server.
2. Configure the following settings to ensure that your users can connect to the Edge Portal app:
   a) Uncheck the **Enable Antivirus Check in Access Policy** box.
   b) In the **Web Application start URI** box, type the starting URI for your web application
   c) In the **Virtual Server IP address** box, type the IP address for your virtual server.
   d) Enable the Rewrite Profile option.

      For client certificate authentication, when a client certificate profile is assigned to virtual server, the option **Require** is not supported in the client certificate profile
3. Click **Finished**.

You have just completed configuring a web application to support the Edge Portal app.

The next task is to assign ACLs to your access policy.

## Running a setup wizard to support BIG-IP Edge Portal on Access Policy Manager 11

Running the portal access setup wizard quickly sets up an access policy, a connectivity profile, and a virtual server for you.

1. Follow the instructions in the wizard to create your access policy and virtual server.
2. Configure the following settings to ensure that your users can connect to the Edge Portal app:
   a) For **Client Side Checks**, uncheck the **Enable Antivirus Check in Access Policy** box.

b) In the **Portal Access Start URI** box, type the starting URI for your web application
c) In the **Virtual Server IP address** box, type the IP address for your virtual server.
d) Enable the Rewrite Profile option.

For client certificate authentication, when a client certificate profile is assigned to virtual server, the option **Require** is not supported in the client certificate profile

3. Click **Finished**.

You have just completed configuring a web application to support the Edge Portal app.

The next task is to assign ACLs to your access policy.

## Assigning ACLs to your access policy

Before you assign ACLs to an access policy, you must:

- Define a web application resource
- Create an access profile

Add ACLs to limit access to resources.

1. Create or select an existing **Access Policy**.
2. In the Access Policy column, click the **Edit** link for the access profile you want to configure to launch the visual policy editor.
   The visual policy editor opens the access policy in a separate screen.
3. On an access policy branch, click the plus symbol (+) to add an item to the access policy.
   A popup screen displays actions on tabs, such as General Purpose and Authentication, and provides a search field.
4. Click the **Assignment** tab, select **ACL Assign**, and click **Add Item**.
5. Click the **Add/Delete Static ACLs** link.
6. Select ACLs to assign to your access policy, and click **Save** when finished.
7. Click **Apply Access Policy**.

Your next task is to disable the Home tab. If this is enabled, it's likely that the Edge Portal app will not render properly.

## Disabling the Home tab

Disabling the Hometab will ensure that the Edge Portal app renders properly.

1. On the Main tab, click **Access Policy** > **Access Profiles**.
   The Access Profiles List screen opens.
2. Click on the name of your access policy that you created.
3. Select the Access Policy tab.
4. In the Web Applications section, click the entry that begins with the name you created.
5. Under the **Resource Items Properties** section, make sure the Home Tab option is unchecked. If not, uncheck the Enabled box.

6. Click **Update**.

## Customizing an access policy to support Edge Portal app

1. On the Main tab, click **Access Policy** > **Access Profiles**.
   The Access Profiles List screen opens.
2. In the Access Policy column, click the **Edit** link for the profile you want to configure to launch the visual policy editor.
   The visual policy editor opens the access profile in a separate window or tab.
3. Click **Add New Macro**.
4. In the **Select macro template:** select Client Classification and Prelogon checks from the drop-box.
5. Click **Save**.
6. Click the plus [+] sign that appears before the Logon Page action.
7. In the Macrocalls section, click the **Client Classification and Prelogon checks** button.
8. Click **Add item**.
   The Client Classification and Prelogon checks action appears in the access policy sequence.
9. Click the underlined word **Deny** in the ending box.
10. In the Select Ending: section, click **Allow**.
11. Click **Save**.
    You have just customized your access policy to support the Edge Portal app.

## Detecting a rooted Android device

You can detect a rooted or jailbroken device using a preconfigured access policy item in Access Policy Manager 11.4 and later.

1. On the Main tab, click **Access Policy** > **Access Profiles**.
   The Access Profiles List screen opens.
2. In the Access Policy column, click the **Edit** link for the access profile you want to configure to launch the visual policy editor.
   The visual policy editor opens the access policy in a separate screen.
3. Click the **(+)** sign anywhere in the access policy to add a new action item.
   An Add Item screen opens, listing predefined actions on tabs such as General Purpose, Authentication, and so on.
4. From the **Endpoint Security (Server-Side)** tab, select **Rooted or Jailbroken Device Detection**.
5. Click **Add Item**.
   The screen is not active while the visual policy editor creates the action. The screen closes and a Properties screen displays.
6. Click **Apply Access Policy** to save your configuration.

The access policy will now detect rooted or jailbroken devices.

# Chapter 4

# How do I control password caching on user devices?

You can configure Access Policy Manager to cache passwords Edge Portal devices. Password caching provides two features:

- Allows users to maintain a connection to web applications resources, and reconnect without requiring a password within the specified time frame.
- Requires screen-locking security on user devices, with a minimum security requirement of a 4-digit PIN.

## Configuring password caching for Edge Portal in APM 11.3.x and earlier

You configure password caching on the server to simplify the user experience with the Edge Portal app, and to require screen lock security on the Edge Portal device.

***Note:*** *Use this procedure with Access Policy Manager® 11.3.x and earlier.*

1. Navigate to **Access Policy** > **Secure Connectivity** > **Connectivity Profiles**.
2. Click the name of the connectivity profile associated with the Web Applications configuration.
3. Click the **Client Configuration** tab.
4. In the Session Settings section, next to General, select the check box **Enable User Password Caching**.
5. Select the password caching option you want to use.

| Option | Description |
|---|---|
| **Allow user to save encrypted password on disk** | Allows the user to save the encrypted password on the device without a time limit. |
| **Cache password within application for *x* minute(s)** | Specifies that the user password is cached in the application on the user's device for the specified period of time. |

6. In the Client Policy section, next to Session Policy, select the check box **Enforce session settings (do not allow users to change session settings)**.
7. Click **Update**.

Password caching is configured for the time period you set. Users are required to configure security to connect to the server. The minimum security requirement is a 4-digit PIN. Edge Portal supports password locking, and does not support pattern locking. If a user attempts to unlock the device five times unsuccessfully, the cached credentials are deleted from the device.

## Configuring password caching for Edge Portal in APM 11.4 and later

You configure password caching on the server to simplify the user experience with the Edge Portal app, and to require screen lock security on the Edge Portal device.

***Note:*** *Use this procedure with Access Policy Manager® 11.4.0 and later.*

1. On the Main tab, click **Access Policy** > **Secure Connectivity**.
   A list of connectivity profiles displays.
2. Highlight the connectivity profile associated with the Web Applications configuration and click **Edit Profile**.
   The Edit Connectivity Profile screen pops up.
3. From Mobile Client Settings in the left pane, select **Android Edge Portal**.
   Settings for the Android Edge Portal display in the right pane.
4. Select the **Allow Password Caching** check box.
5. From **Save Password Method**, select the password caching option you want to use: **disk** or **memory**.
   Selecting **disk** allows the user to save the encrypted password on the device without a time limit. Selecting **memory** specifies that the user password is cached in the application on the user's device for a configurable period of time.
6. If the **Password Cache Expiration (minutes)** field displays, type the number of minutes you want the password to be cached in memory.
7. Keep the **Enforce Device Lock** check box selected to support screen lock security.
   Edge Portal supports password locking, and does not support pattern locking. If this check box is selected, you can change the remaining settings.
8. Select the **Device Lock Method** from the list.
   Defaults to numeric.
9. Type the **Minimum Passcode Length**.
   Defaults to 4.
10. Type the **Maximum Inactivity Time (minutes)**
    Defaults to 5.

Password caching is configured for the time period you set. Users are required to configure security to connect to the server. The minimum security requirement is a 4-digit passcode. If a user attempts to unlock the device five times unsuccessfully, the cached credentials are deleted from the device.

# Chapter 5

# About access policies for Edge Portal app

In your configuration, you might be required to configure separate access policy branches for Edge Portal app.

Edge Portal app does not support client-side checks. There are a number of ways you can configure an access policy to allow a connection to a web applications resource for iOS clients. Access Policy Manager allows flexibility when configuring access policies, so there are many possible ways to configure for Edge Portal clients. The following methods can work:

- Start the access policy with the Client-Side Check Capability check. This provides a branch for clients that do not support client-side checks, including mobile devices. Assign authentication and a web applications resource to this branch.
- Use an existing access policy with client-side checks. The mobile device will fail to the fallback branch of the first client-side check. Assign authentication and a web applications resource to this branch.
- Create a specific branch for mobile clients. You can use an empty action and session variables to identify the mobile client. On the branch you identify for mobile clients, add authentication and assign a web applications resource for mobile devices.

## Access policy example

To differentiate the Edge Portal™ application for mobile devices from other client types and operating systems, you can use the **Client Classification and Prelogon Checks** macro.

The following information applies to this macro, and the access policy items configured within it:

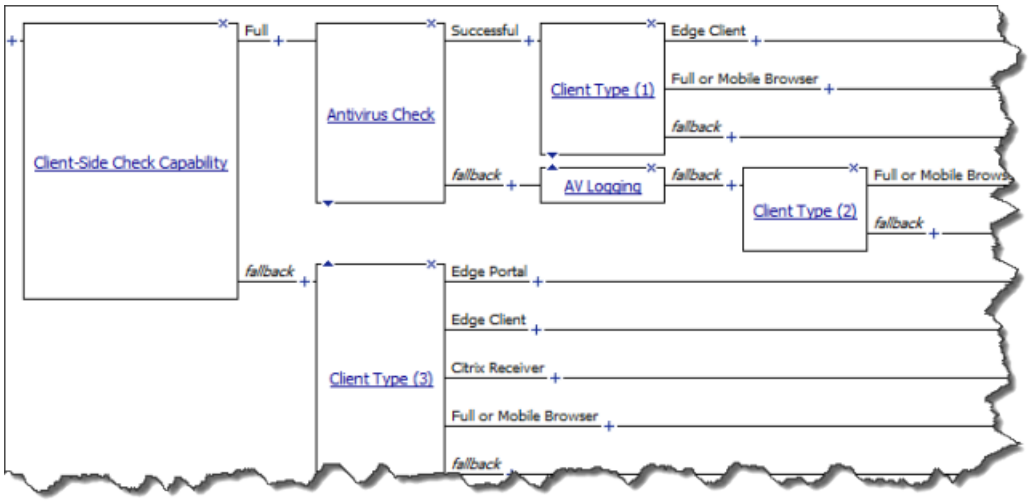
1. Client-side check capability. This checks that the client is capable of running client-side checks, and if the client is capable, an antivirus check is run. If the client is not capable of running client-side checks, it falls back to a client type check.
2. The client type check is an empty agent that is configured with branch rules for several client types, which you can view and edit on the **Branch Rules** page. The simple branch rule for Edge Portal is **Expression: Client is Portal Client**. The **Advanced** tab shows the full expression:

```
expr { [mcget {session.client.type}] == "portalclient" }
```

3. To obtain more information about client OS version or device type, you can inspect the *user-agent* session variable. For example, Edge Portal application uses the following user-agent strings, depending on OS version and device type:

| Mobile Device Type | OS version | user-agent session variable |
|---|---|---|
| iPhone with iOS 4 | 4.3.5 | *Mozilla/5.0 (iPhone; U; CPU iPhone OS 4_3_5 like Mac OS X; en-us) AppleWebKit/532.9 (KHTML, like Gecko) Mobile/8B117* |
| iPhone with iOS 5 | 5.0 | *Mozilla/5.0 (iPhone; CPU iPhone OS 5_0 like Mac OS X) AppleWebKit/534.46 (KHTML, like Gecko) Mobile/9A334 EdgePortal/1.0.2* |
| iPad | 4.3 | *Mozilla/5.0 (iPad; U; CPU OS 4_3_1 like Mac OS X; en-us) AppleWebKit/533.17.9 (KHTML, like Gecko) Version/5.0.2 Mobile/8G4 Safari/6533.18.5* |
| iPod Touch | 4.1 | *Mozilla/5.0 (iPod; U; CPU iPhone OS 4_1 like Mac OS X; en-us) AppleWebKit/532.9 (KHTML, like Gecko) Mobile/8A293* |
| Android (Samsung Galaxy Tab) | 2.2 | *Linux; U; Android 2.2; en-us; SGH-T849 Build/FROYO) AppleWebKit/533.1 (KHTML, like Gecko) Version/4.0 Mobile Safari/533.1 EdgePortal/1.0.1* |

**Figure 1: Advanced access policy to support Edge Portal**



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