

# HP Application Performance Management for Smartphone

For the Android and iOS operating systems

Software Version: 1.00

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## Getting Started Guide

Document Release Date: January 2012

Software Release Date: January 2012



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## HP Application Performance Management for Smartphone Overview

Application Performance Management for Smartphone (APM for Smartphone ) allows application owners and support engineers to view current application performance and availability, to help in diagnosing application issues anytime and anywhere. APM for Smartphone is designed to focus on selected applications that are monitored by HP Business Process Monitor (BPM).

You can use APM for Smartphone to view performance and availability data for an application and can drill down to see this data for each location and each transaction. Further drill downs enable you to view errors, as well as the transaction breakdown over time. You can also invoke a one-off run of the transaction, to see its current status.

### Related Information

The following documents include additional information related to HP Anywhere and APM for Smartphone:

- *HP Anywhere Installation and Configuration Guide*
- *HP Anywhere Administrator Guide*

These documents are available in the [HP Live Network](https://h20117.www2.hp.com/wiki/) site (<https://h20117.www2.hp.com/wiki/>).

For more information related to End User Management, see *the Using End User Management Guide*. This document is available as part of the BSM Documentation Library or on the [Documentation Support Site](http://h20230.www2.hp.com/selfsolve/manuals) (<http://h20230.www2.hp.com/selfsolve/manuals>).

## Administering Application Performance Management for Smartphone

- ["Installing and Configuring APM for Smartphone" \(on page 7\)](#)
- ["Configuring the HPA-BSM Authentication Plug-in" \(on page 9\)](#)
- ["Log Files" \(on page 10\)](#)

### Installing and Configuring APM for Smartphone

This section provides information about the system requirements and how to install and configure APM for Smartphone.

#### Requirements

**Version:**

- HP Anywhere shell (on the mobile device) 9.00
- HP Anywhere (on the server) 9.00
- HP Business Service Management version 9.12 with the BSM 9.12 APM Mini App patch, and higher.

**Platform:**

- Android 2.2 and later
- iOS 4.0 and later

**Supported devices:** Smartphones

**Mobile connectivity:** Standard communication with the HP Anywhere Server, such as Wi-Fi or 3G.

**Note:** Push notification does not work for Wi-Fi behind a firewall.

### Install and Configure APM for Smartphone

1. If needed, install HP Anywhere. For installation details, see *HP Anywhere Installation and Configuration Guide*.
2. If needed, install Business Service Management.
  - a. Configure applications in End User Management Administration. For details, see *the Using End User Management Guide* in the BSM Documentation Library,
  - b. Optionally configure EUM alerts for use by the APM mini app. This enables you to access an application in the mini app directly from an alert received on the mobile device as an email or SMS. To configure an alert, you must include the following pattern in the alert header or footer section:

```
hpanywhere://MiniApmService/<Entity ID>
```

For details on configuring alerts, see *the Using End User Management Guide* in the BSM Documentation Library,

- Configure the HP Anywhere server and the relevant mini app by specifying the BSM as the data source for APM for Smartphone. For details, see *HP Anywhere Administrator Guide*.

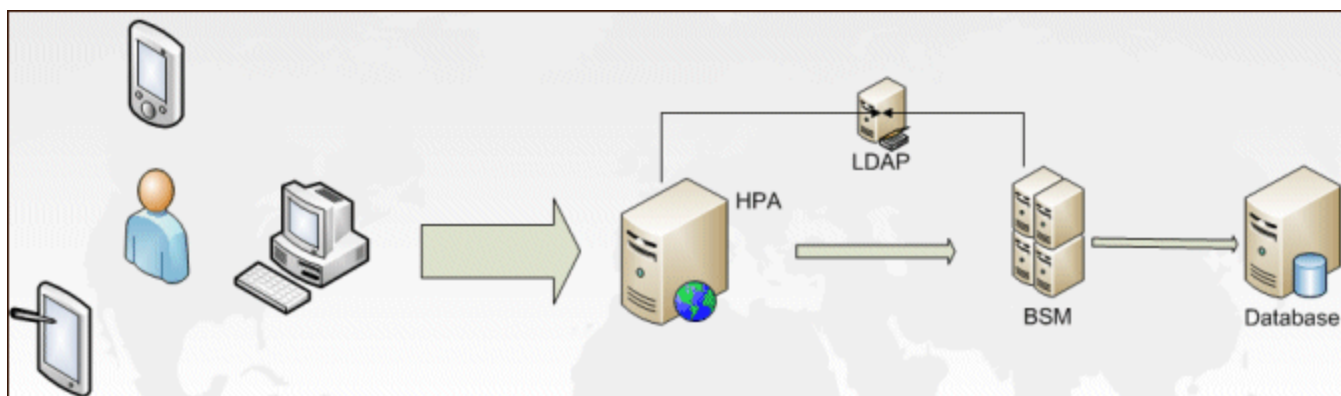
When defining the data source in HP Anywhere, enter the following:

Setting	Description
<b>HostName</b>	BSM host to which to connect.
<b>Port</b>	Port on the BSM host to which to connect.
<b>Protocol</b>	Select your HPA-BSM protocol.  If your HPA-BSM protocol is https, you should have already imported a certificate from BSM when configuring LDAP over SSL. If you have not yet been done so, import the certificate as described in "Configure LDAP Over SSL" in <i>HP Anywhere Installation and Configuration Guide</i> .
<b>AuthPolicy</b>	Select your HPA-BSM authentication policy. <ul style="list-style-type: none"> <li>If you select <b>LWSSO</b> as the Authentication Policy between the HP Anywhere server and BSM, mini app end users do not need to type the BSM user and password on their mobile device. If you select <b>Basic</b> (non-LWSSO) as the Authentication Policy, the end user must enter the BSM user and password.</li> <li>To use LWSSO, you must have the same LWSSO token key (initstring) defined in BSM and in the HPA server. In BSM, this is found in <b>Admin &gt; Platform &gt; Users and Permissions &gt; Authentication Management</b>. For details, see "HP Anywhere Lightweight Single Sign-On Configuration" in <i>HP Anywhere Installation and Configuration Guide</i>.</li> </ul>

## BSM-HPA Connection Flows

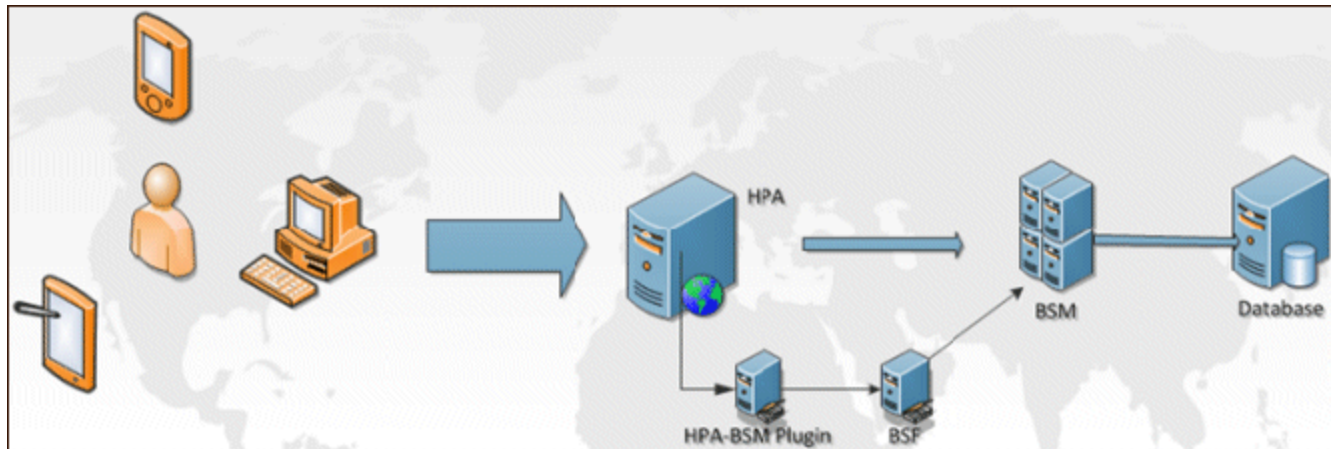
By default, the HP Anywhere Server connects to HP Business Service Management using LDAP. If you do not want to connect using LDAP, you can install and connect using the HPA-BSM plug-in. For details, see ["Configuring the HPA-BSM Authentication Plug-in" \(on page 9\)](#).

The following diagram illustrates the APM mini app flow from the end-user mobile device through the HPA Server to BSM using LDAP:





The following diagram illustrates the APM mini app flow from the end-user mobile device through the HPA Server to BSM using the HPA-BSM plug-in:



## Configuring the HPA-BSM Authentication Plug-in

You can install the HPA-BSM plug-in to connect the HPA Server directly to the BSM Gateway Server, without using LDAP. The plug-in can be downloaded from the HP Live Network (HPLN). To install the HPA-BSM plug-in, do the following:

1. On the HPA Server, edit the `<Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\config\conf\custom-context.xml` file and add the following lines:

```
<bean name="customPropertyPlaceholderConfigurer"
class="org.springframework.beans.factory.config.PropertyPlaceholderConfigurer">

<property name="order" value="2"/>

<property name="ignoreUnresolvablePlaceholders" value="true"/>

<property name="properties">

<util:properties>

<prop
key="bsfAuthenticationExternalService">bsmAuthenticationService</prop>

<prop key="bsfUsersExternalService">bsmAuthenticationService</prop>

<prop
key="bsfGroupsExternalService">bsmAuthenticationService</prop>

</util:properties>

</property>

</bean>

<bean name="bsmAuthenticationService"
class="com.hp.bsm.ita.bsf.BSMAuthenticationProvider"></bean>
```

The above code uses the following format:

```
<bean name="customPropertyPlaceholderConfigurer"
class="org.springframework.beans.factory.config.PropertyPlaceholderConfigurer">
  <property name="order" value="2"/>
  <property name="ignoreUnresolvablePlaceholders" value="true"/>
  <property name="properties">
    <util:properties>
      <prop key="bsfAuthenticationExternalService">bsmAuthenticationService</prop>
      <prop key="bsfUsersExternalService">bsmAuthenticationService</prop>
      <prop key="bsfGroupsExternalService">bsmAuthenticationService</prop>
    </util:properties>
  </property>
</bean>
<bean name="bsmAuthenticationService" class="com.hp.bsm.ita.bsf.BSMAutheticationProvider"></bean>
```

2. On the HPA Server, edit the  
<Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\config\conf\bsf.properties file and change the value of the following three properties to EXTERNAL:
  - authentication.provider=EXTERNAL
  - users.provider=EXTERNAL
  - groups.provider=EXTERNAL
3. Edit the HPA-BSM plug-in configuration file bsm-bsf.properties, which is located in the root of bsm-bsf.jar. Change the value of bsm.host.name to the BSM host name.
4. Copy the bsm-bsf.jar plug-in file to the <Root>\HP\Anywhere\apps\bsf\WEB-INF\lib directory on the HPA Server.
5. Stop HP Anywhere
6. Delete the following cache folders on the HPA Server:
  - <Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\osgi-cache
  - <Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\generated
7. Start HP Anywhere

## Log Files

Log files, which can be used for troubleshooting, are located on both the HPA server and the BSM Gateway Server.

### HP Anywhere Server log files:

- <Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\logs\miniApm.log
- <Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\logs\btoa\_app.log
- <Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\logs\server.log
- <Root>\HP\Anywhere\glassfish\glassfish\domains\BTOA\logs\bsf.log

### HP Business Service Management Gateway Server log files:

- <Root>\HPBSM\log\EJBContainer\euem.log
- <Root>\HPBSM\log\topaz\_all.ejb.log

## Using APM for Smartphone

- ["Overview: How to Use the Mini App" \(on page 11\)](#)
- ["Configuring the Mini App" \(on page 11\)](#)
- ["Working with the Mini App" \(on page 14\)](#)

### Overview: How to Use the Mini App

After you have installed HP Anywhere and have downloaded the APM mini app to your mobile device, you can view overall performance and availability status for selected applications. You can then drill down to view transaction and location performance and availability status for a specific application. Additional drilldowns enable you to view transaction breakdown over time and errors for individual transactions. You can also invoke a one-off run of a transaction to obtain its current status and can view a problematic application directly from an alert sent to your mobile device (the alert must be configured for this functionality in BSM).



The client Home screen (the Summary screen) provides a summary view for each mini app that is applicable to the user's job role. This view provides enough information at a glance to make quick decisions and decide if you need to look at more data. For the APM mini app, two pie charts are displayed showing the availability and performance statuses for all the selected applications.

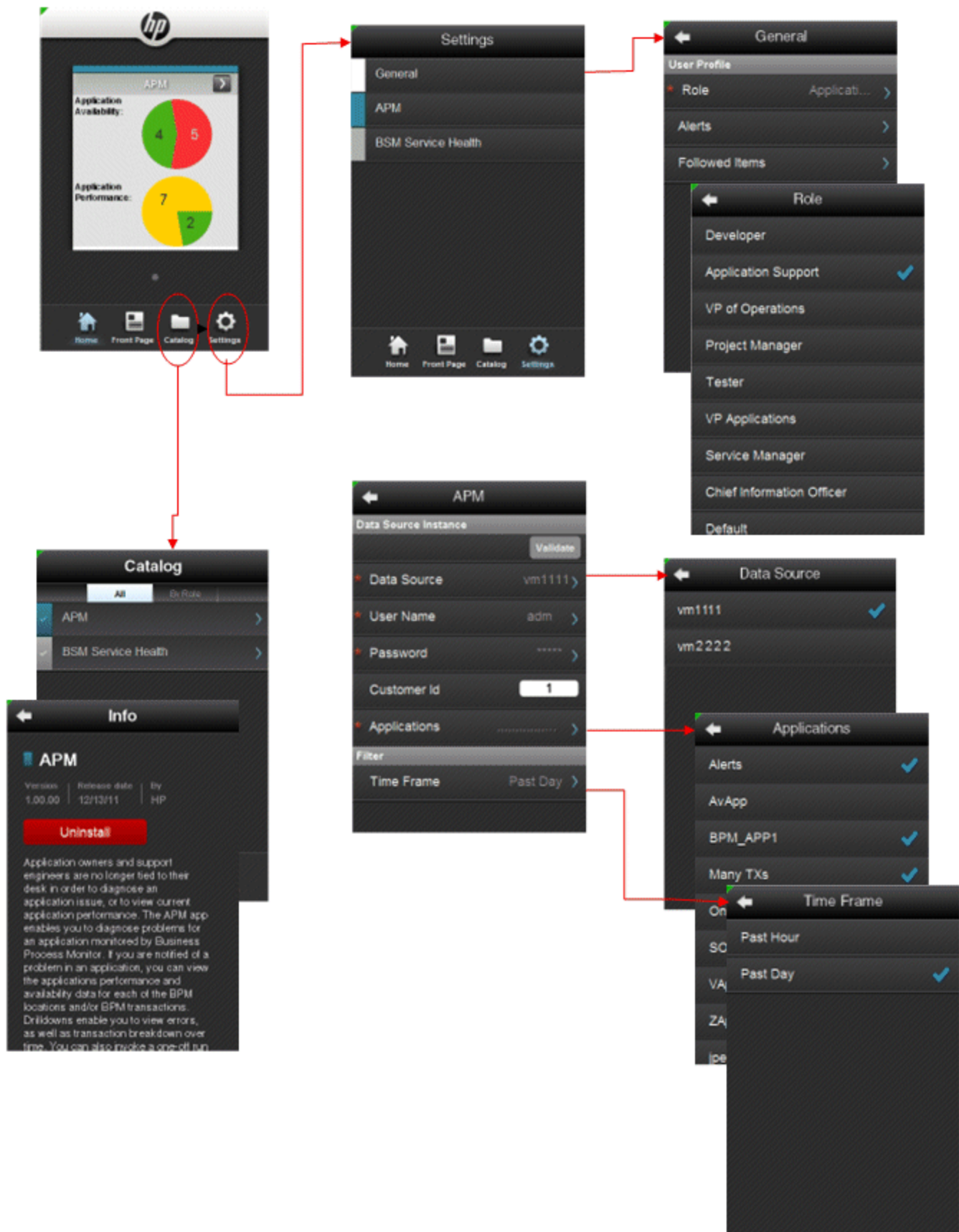
The client Front Page screen displays the applications with a status of yellow (warning) or red (critical) for all the mini apps installed on the client. From the Front Page, you can drill down to view details for a specific application. For the APM mini app, the Front Page shows worst status (between availability and performance) for each displayed entity.

**Note:** To refresh the mini app display, flick your screen down.

### Configuring the Mini App

To configure the APM mini app:

1. On your mobile device, tap the HP Anywhere icon.
2. Enter your user and password, and the URL of HP Anywhere (the first time you access the mini app).
3. On the **Summary** screen, tap **Settings**  and:
  - a. Tap **General** to configure the role and other general settings, or
  - b. Tap **APM** to configure APM mini app specific settings, such as data source, applications, and time frame.
4. You can also tap **Catalog**  to uninstall the mini app.
5. Follow the configuration paths in the following flow chart. For details on the configuration screens, see ["Configuration Screens" \(on page 13\)](#).



## Configuration Screens

The following table describes the different screens used for configuring the APM mini app:

Screen	Description
Catalog	Displays the mini apps that are available on the HP Anywhere Server to which you connect.
Info (catalog)	Displays the status (installed or uninstalled) of the selected mini app and enables you to install or uninstall the mini app as applicable.
Settings	Displays the categories of settings that you use to configure your mini apps. There are general settings that apply to all installed mini apps and settings that are specific to each installed mini app.
General	Displays the general settings categories, that are applicable for all the installed mini apps.
Role	<p>Select your user role.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>The roles are configured on the HP Anywhere server by the HP Anywhere administrator.</li> <li>You can select only one role.</li> </ul>
APM	Displays the settings that are specific to the APM mini app.
Data Sources	<p>Select the source (HP Business Service Management (BSM) Gateway Server) for the data used by the APM mini app.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>The connection between the HP Anywhere Server and BSM Gateway Servers are configured on the HP Anywhere server by the HP Anywhere administrator.</li> <li>You can select only one data source.</li> </ul>
Applications	<p>Select the applications you want to view in the APM mini app.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>Only the applications for which you have viewing permission in BSM are displayed.</li> <li>You can select multiple applications.</li> </ul>
Time Frame	Select the time frame (past hour or past day) for which to

Screen	Description
	display application data.

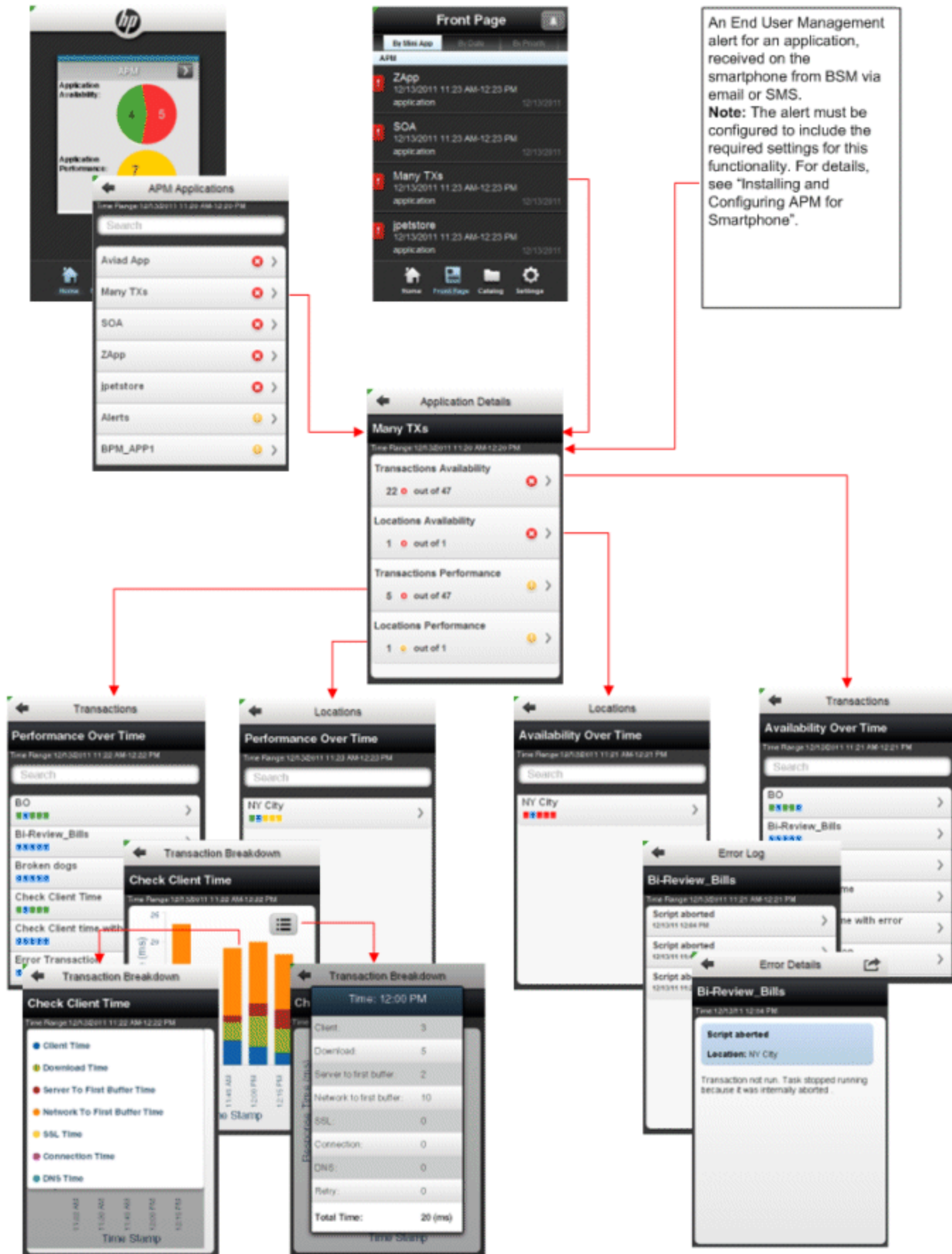
## Working with the Mini App

To use the APM mini app and view application, transaction, and location performance and availability:

1. On your mobile device, tap the HP Anywhere icon.
2. Enter your user and password, and the URL of HP Anywhere (the first time you access the mini app).
3. Follow the workflow paths in the following flow chart. For details on the APM mini app screens, see "[Mini App Screens](#)" (on page 16).

**Note:** To refresh the mini app display, flick your screen down.






## Mini App Screens

The following table describes the different APM mini app screens:

Screen	Description
Summary (Home)	<p>Displays two pie charts showing the total number of selected applications by their performance and availability status. Statuses are calculated based on the performance and availability thresholds and rules configured for the application in HP Business Service Management. The following statuses are displayed:</p> <ul style="list-style-type: none"> <li>• <b>Green.</b> OK</li> <li>• <b>Yellow.</b> Warning</li> <li>• <b>Red.</b> Critical</li> <li>• <b>Blue.</b> No data</li> </ul>
APM Applications	Displays each of the selected applications with its status. The status is the worst status between availability and performance.
Front Page	Displays all of the entities selected for all of the mini apps on the mobile device that have a status of yellow (warning) or red (critical). The status is the worst status between availability and performance. By default, the entities are sorted by mini app, but you can choose to sort them by date or priority.
Application Details	Displays a summary of the performance and availability status by transaction and location, for the selected application.
Performance Over Time (Transactions or Locations)	<p>Displays a list of the application's transactions or locations and for each one, displays the performance status broken down by sub-units of the selected time frame.</p> <p>When viewing the performance over time for transactions, swipe a transaction to display the <b>Invoke</b> control. When you tap Invoke, you launch a one-off run of the transaction and are notified when the run has finished.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• If the transaction is configured to run from multiple locations, when you tap Invoke, you are prompted to select a location for the transaction run.</li> <li>• Push notification must be enabled for HP Anywhere. For details, see <i>HP Anywhere Administrator Guide</i>.</li> <li>• Push notification does not work for Wi-Fi behind a firewall.</li> </ul>
Transaction Breakdown	Displays a bar chart of the average transaction breakdown for a selected transaction, or all the transactions for a selected location, broken down into sub-units of the selected time frame.



Screen	Description
	<p>Tap a bar in the chart to display the breakdown as a table.</p> <p>Tap the legend icon  to display a screen showing the breakdown categories, which you can tap to include in (default) or exclude from the bar chart.</p>
Availability Over Time	<p>Displays a list of the application's transactions or locations and for each one, displays the availability status broken down by sub-units of the selected time frame.</p> <p>When viewing the availability over time for transactions, swipe a transaction to display the <b>Invoke</b> control. When you tap Invoke, you launch a one-off run of the transaction and are notified when the run has finished.</p> <div style="background-color: #f0f0f0; padding: 10px;"> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• If the transaction is configured to run from multiple locations, when you tap Invoke, you are prompted to select a location for the transaction run.</li> <li>• Push notification must be enabled for HP Anywhere. For details, see <i>HP Anywhere Administrator Guide</i>.</li> <li>• Push notification does not work for Wi-Fi behind a firewall.</li> </ul> </div>
Error Log	Displays a log of the errors that occurred in the selected transaction during the selected time frame.
Error Details	Displays details of a selected error.

## Troubleshooting the APM Mini App

This section includes the following troubleshooting topics for the APM mini app:

<b>Unable to See the Login Screen</b> .....	<b>17</b>
<b>Failed to Log In with the BSM User Name</b> .....	<b>18</b>
<b>General Connectivity Issues</b> .....	<b>18</b>
<b>Front Page Display Error</b> .....	<b>18</b>
<b>Do Not See Applications Under Application Settings</b> .....	<b>18</b>
<b>Unable to Invoke a Transaction / Do not Receive Result Notification</b> .....	<b>18</b>
<b>Set as Alert Template Does not Work</b> .....	<b>18</b>
<b>General UI Issues</b> .....	<b>18</b>
<b>Reports Data Accuracy Verification</b> .....	<b>18</b>

### Unable to See the Login Screen

If you are unable to see the login screen:

- Check the HPA Server logs
- Refer to the HPA troubleshooting documentation

### Failed to Log In with the BSM User Name

If you are unable to log in to the APM mini app with your BSM user name:

- Check if HPA is able to access the BSM Server by logging in to the HPA Server and opening a browser with the BSM URL.
- If the HPA Server failed to communicate with the LDAP Server, refer to the HPA troubleshooting documentation.
- If HPA failed to authenticate with BSM:
  - Check if the login to BSM was successful
  - Check the HPA Server logs for more information

### General Connectivity Issues

To troubleshoot general connectivity issues, check the connectivity between the specific mobile application and the HPA Server.

### Front Page Display Error

If you receive a front page display error, check the HPA Server logs for more information.

### Do Not See Applications Under Application Settings

If you do not see applications on the Application Settings page, log in to BSM as the same user and check that you have permissions to view these applications.

### Unable to Invoke a Transaction / Do not Receive Result Notification

If you are unable to invoke a transaction, or after having invoked a transaction do not receive a result notification:

- Check the log files on the HPA Server
- Check the log files on all the HP BSM Gateway Servers in your system
- Refer to **push notification** troubleshooting in the HPA troubleshooting documentation

For details on the relevant log files, see "[Log Files](#)" (on page 10).

### Set as Alert Template Does not Work

The Set as Alert Template option, which you access by swiping an entity on the Front Page, is currently not functional for the APM mini app.

### General UI Issues

To troubleshoot general UI issues, check if the problem is specific to one mobile device or all devices.

### Reports Data Accuracy Verification

The following table lists the APM mini app reports and their equivalent report in BSM's End User Management application that can be used to verify the accuracy of the mini app report data:

APM for Smartphone Report	End User Management Report
Application Summary	Application Summary
Applications (worst performance and availability)	Application Summary
Availability Over Time > Transaction	Application Health
Availability Over Time > Transaction > Breakdown	BPM Error summary> Error Distribution by Transaction > Error Log
Availability Over Time > Location	Performance Over Time (grouped by location)
Availability Over Time > Location > Error Log	BPM Error summary> Error Distribution by Location > Error Log
Performance Over Time > Transaction	Performance Over Time
Performance Over Time > Transaction > Breakdown	Performance Analysis (grouped by transaction) > Transaction Breakdown component
Performance Over Time > Location	Performance Over Time (grouped by location)
Performance Over Time > Location > Breakdown	Performance Analysis (grouped by location) > Transaction Breakdown component

For details on End User Management reports, refer to *the Using End User Management Guide* in the BSM Documentation Library.

