HP Anywhere IDE

Windows/Mac

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Developer Guide (Command Line Tools)

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Command Line Tools

The HP Anywhere Command Line Tools enable you to develop HP Anywhere apps on Windows or Mac while using your favorite IDE to edit your source code. You can create, build, and deploy an app project, as well as start and stop the HP Anywhere server via the command line.

Prerequisites:

The following must be installed on your computer:

- JDK 1.7 or later

- Maven 3.0.4 or later

- Google Chrome

- Node.js

To install the HP Anywhere Command Line Tools:

1. Download the **HP Anywhere Command Line Tools** .zip file from the Developer Zone.

2. Extract the contents of the .zip file to a convenient location on your computer.

3. If you want to use the environment variable values defined on your computer for M2_HOME and JAVA_HOME, skip to the next step.
   Otherwise, in the extracted .zip file folder, browse to and open **setEnv.cmd** (Windows) or **setEnv.sh** (Mac), and set these environment variables:

   - **set M2_HOME=**<*The path to your Maven installation folder*>
     Example: set M2_HOME=C:\hp\HPAnywhere\apache-maven-3.0.4

   - **set JAVA_HOME=**<*The path to your JDK installation folder*>
     Example: set JAVA_HOME=C:\dev\jdk1.7.0

4. On your computer, edit the **PATH** system variable to include the path to the folder to which you extracted the .zip file in step 2 above.

To verify that the HP Anywhere Command Line Tools are configured correctly:

1. Open a command line (Windows) or terminal (Mac).

2. Do the following:

   - **Windows:** Run **hpa.cmd**

   - **Mac:**

     i. Run: **chmod +x <path to hpa.sh>**

     ii. Run: **hpa.sh**.

3. View the output to verify that the command is recognized.

Usage Syntax

-build	Builds an **HP Anywhere** project into a deployable .zip file. You must run this from the project folder.
-create <templateId> <appName> <package> <formFactors>	Creates an **HP Anywhere** starter project in the current folder. This command contains the following optional arguments: • **<templateId>** One of the available templates. (Use **-listTemplate** to view all templates.) • **<appName>** The name of the app (free text). Use English characters and numbers only. • **<package>** The Java package in which to store the Java resources. • **<formFactors>** The supported form factors for this project. Possible options: **desktop**, **smartphone**and ,**tablet** in any comma-separated combination, without any spaces. **Examples:** *hpa.cmd -create blank myAppName com.my.package smartphone,desktop* *hpa.sh -create my-report myAppName com.my.package smartphone,tablet*

-deploy <full>	Deploys a .zip file of the **HP Anywhere** app to the local **HP Anywhere** server. You must run this from the project folder. This command contains the following optional argument: **full** Builds and deploys the app. **Default:** Deploy only (use only after **-build**). **Examples:** -deploy -deploy full

-listTemplates	Lists all available HP Anywhere template projects. Currently supported templates: **blank** An HP Anywhere starter project that contains the project folder structure without application content. **hello-world-angular** An HP Anywhere starter project that generates an app using the Angular framework. This project is targeted for use on tablets and smartphones. **hello-world-enyo** An HP Anywhere starter project that generates an app using the Enyo framework. This project is targeted for use on tablets and smartphones. **hello-world-jqm** An HP Anywhere starter project that generates an app using the JQM framework. This project is targeted for use on tablets and smartphones. **hello-world** An HP Anywhere starter project that generates an app using the native framework with JavaScript and HTML code. **hello-world-sencha** An HP Anywhere starter project that generates an app using the Sencha Touch framework. This project is targeted for use on tablets and smartphones. **my-report-angular** An HP Anywhere starter project that generates an app using the Angular framework. This project is targeted for use on tablets and smartphones. **my-report-enyo** An HP Anywhere starter project that generates an app using the Enyo framework. This project is targeted for use on tablets and smartphones. **my-report-jqm** An HP Anywhere starter project that generates an app using the JQM framework. This project is targeted for use on tablets and smartphones. **my-report** An HP Anywhere starter project that generates an app using the native framework with JavaScript and HTML code. **my-report-sencha** An HP Anywhere starter project that generates an app using the Sencha Touch framework. This project is targeted for use on tablets and smartphones.
-removeAllApps	Removes all deployed apps and their configuration files from the local HP Anywhere server.
-simulator	Opens HP Anywhere Simulator in a Google Chrome browser.
-start	Starts the local HP Anywhere server.
-status	Queries the local HP Anywhere server status (running or stopped).
-stop	Stops the local HP Anywhere server.

> **Tip:** You can append **-verbose** to any of the commands in the table above to display debug messages for that command. For example:
>
> *hpa.cmd -create blank myAppName com.my.package tablet -verbose*
>
> *hpa.sh -create blank myAppName com.my.package tablet -verbose*

App Development Lifecycle Example

The following table shows an example of the app development lifecycle.

1	Step to perform	Start the local HP Anywhere server.
	Command to use	hpa.cmd -start
	Output	The local HP Anywhere server starts in the background. You can run the following command to query the server status. `hpa -status or hpa.sh -status`

2	Step to perform	Create an app project from a template.
		This creates an app based on the **my-report-angular** template that supports the smartphone form factor.

	Command to use	**Windows:**
		
		`hpa -create my-report-angular myApp com.my.app smartphone`
		Mac:
		
		`hpa.sh -create my-report-angular myApp com.my.app smartphone`

	Output	`C:\Users\Sami\projects>hpa -create blank myApp com.my.app smartphone`
		
		`Creating blank project at: Creating blank project at: C:\Users\Sam\projects\myApp`
		
		`Configuring app...`
		
		`Project created successfully.`
		
		`What's next?`
		
		`You can build an archive (.zip) that is ready for deployment by running:`
		
		`cd myApp && hpa.cmd -build`
		(These are two commands that are separated by &&.)

3	Step to perform	Edit source code. Do this in any IDE.
	Command to use	--
	Output	--

4	**Step to perform**	Build the project. Make sure to run it from the app project folder. This creates an archive (.zip) that is ready for deployment.

	Command to use	**Windows:**
		
		`hpa -build`
		Mac:
		
		`hpa.sh -build`

	Output	`C:\Users\Sam\projects>cd myApp && hpa.cmd -build`
		
		`Building app. Note: This may take a few minutes to fetch Maven dependencies the first time you build your app.`
		
		`Your app is located in: C:\Users\Sam\projects\myApp\target\myApp-cp.zip`
		
		`Project created successfully.`
		
		`What's next?`
		
		`You can deploy the app to your local HP Anywhere server by running:`
		
		`hpa.cmd -deploy`

5	**Step to perform**	Deploy the app project to the HP Anywhere server. Make sure to run it from the app project folder.

	Command to use	**Windows:**
		
		`hpa -deploy`
		Mac:
		
		`hpa.sh -deploy`

	Output	`C:\Users\Sami\projects\myApp>hpa.cmd -deploy`
		
		`Deploying app to the HP Anywhere server`
		
		`What's next?`
		
		`You can open HP Anywhere Simulator by running:`
		
		`hpa.cmd -simulator`

6	Step to perform	View the app in HP Anywhere Simulator. Make sure to run it from the app project folder.

	Command to use	**Windows:**
		
		`hpa -simulator`
		
		Mac:
		
		`hpa.sh -simulator`

	Output	Your app opens in HP Anywhere Simulator.