

# Intel Unite<sup>®</sup> Plugin for Live Background

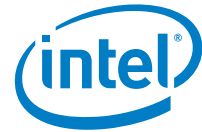
User Guide

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*June 2019*

*Revision 1.0*

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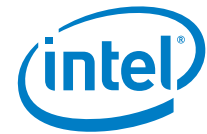
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## Revision History

Revision	Description	Date
1.0	Initial release	July 2019

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## 1.0 Introduction

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The Intel Unite® Plugin for Live Background enables administrators to set a custom background for their organization's hub by setting the Uniform Resource Locator (URL) / path to a modifiable Hypertext Markup Language (HTML) file or a web page. It has a custom property called [Background image link](#), which is used to set the path to the file or web page.

By using Intel Unite® Plugin for Live Background, it is possible to modify default hub background and place an HTML file or web page link to render instead, enabling third-party developers to customize it and adding the choice to have different usages of hub background core properties only by changing the logic inside browsable HTML files.

### 1.1 Scope

This user guide provides instructions on how to install the Intel Unite® Plugin for Live Background and describes its key features.

### 1.2 Intended Audience

The intended audience for this document includes engineers and IT professionals who are responsible for installing, configuring, and maintaining the Intel Unite® Software.

### 1.3 Terminology

**Table 1. Terminology**

Term	Definition
CSS	Cascading Style Sheet
IE	Internet Explorer
JSON	JavaScript* Object Notation
HTML	HyperText Markup Language
URL	Uniform Resource Locator
WPF*	Windows* Presentation Foundation

### 1.4 References and Resources

**Table 2. Reference Documents and Resources**

Doc ID	Title	Location



## 2.0 *Prerequisites*

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This section describes the prerequisites and procedures for installing the Intel Unite® Plugin for Live Background.

Intel Unite® Plugin for Live Background requires the Intel Unite® Hub to be installed and assigned to a configuration of the Admin portal that includes the plugin .Cab file. Section [2.1](#) and [2.2](#) describe the hardware and software requirements.

### 2.1 **Hardware Requirements**

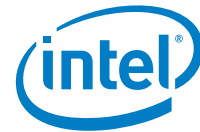
Any display connected to the hub.

### 2.2 **Software Requirements**

Intel Unite® Plugin for Live Background has the following minimum software requirements:

- Intel Unite® software for the server, version 4.0 or greater.
- Intel Unite® software for the hub, version 4.0 or greater.

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## 3.0 Installation

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This section explains how to install the Intel Unite® Plugin for Live Background on the server and on the hub.

**Note:** The actions in this section must be performed using a system on the same network as the Admin Portal server.

### 3.1 Upload the Plugin Package

Follow the steps below to upload the plugin installation package:

1. Open a web browser (Intel recommends Chrome\* for this installation).
2. Browse to the Admin Portal (<https://<FDQN of Server>/intelunite/admin>).
3. Log in to the Admin Portal with an account that has permission to upload packages.
4. Under Device Management menu, click **UPLOAD PACKAGE**.
5. Browse to the location of the [LiveBackground.cab](#) package file, select it, and click **Open**.
6. Confirm the appearance of the Success message.

### 3.2 Approve the Plugin Package

Follow the steps below to approve the plugin installation package:

1. Open a web browser (Intel recommends using Chrome for this installation).
2. Browse to the Admin Portal (<https://<FDQN of Server>/intelunite/admin>).
3. Log in to the Admin Portal with an account that has permission to approve packages.
4. Under Device Management menu, click **FEATURES/APPS**.
5. Click **Package Approval** to display the list of package(s) awaiting approval.
6. Find the line item with the name Intel Unite® Plugin for Live Background and click **Approve**.

### 3.3 Add the Plugin to a Hub Configuration

Follow the steps below to add the plugin to a hub configuration:

1. Open a web browser (Intel recommends using Chrome for this installation).
2. Browse to the Admin Portal (<https://<FDQN of Server>/intelunite/admin>).
3. Log in to the Admin Portal with an account that has permission to create and modify configurations.
4. Under Device Management menu, click **CONFIGURATIONS**.
5. Click **Hub Configurations** to display the list of hub configurations.
6. Click **Edit** next to the hub configuration that will have the Intel Unite® Plugin for Live Background capability.
7. Click the **plus sign (+)** next to Intel Unite® Plugin for Live Background in the Available Features/Apps section and verify that Intel Unite® Plugin for Live Background appears in the Selected Features/Apps section.
8. Click **Save Changes**.
9. Confirm that the hub device is assigned to a hub group that is configured with Intel Unite® Plugin for Live Background assigned.

### 3.4 Set the Path/URL to Browse for the Hub Background

Follow the steps below to set the path/URL to browse for the hub background:

1. Open a web browser (Intel recommends using Chrome for this installation).
2. Browse to the Admin Portal (<https://<FDQN of Server>/intelunite/admin>).
3. Log in to the Admin Portal with an account that has permission to create and modify configurations.
4. Under Device Management menu, click **HUBS AND CLIENTS**.
5. In the Device Groups section, select the group/device that has the configuration with the Intel Unite® Plugin for Live Background capability and click button **Edit Device**.
6. In the Features/Apps section, look for the Intel Unite® Plugin for Live Background [Background image link](#) property.
7. Assign your HTML path to the property [Background image link](#) and click **Save Changes**.

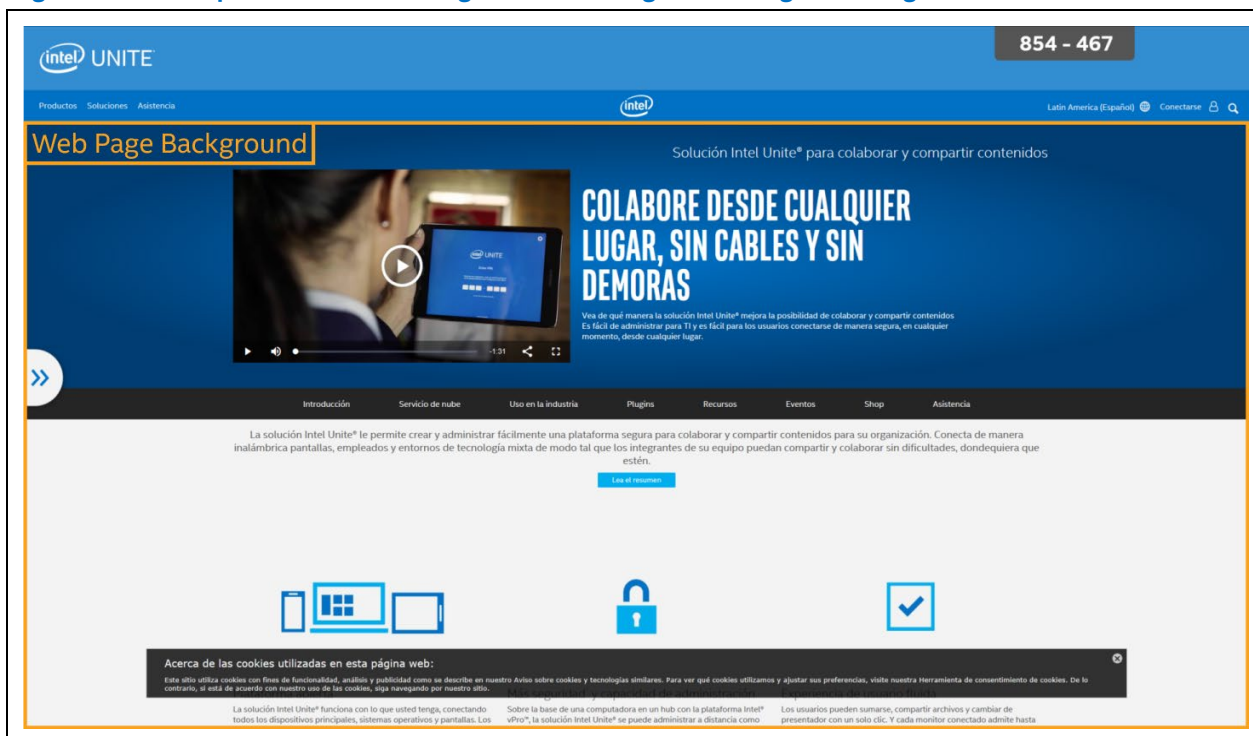
### 3.5 Download the Plugin to a Hub

Follow the steps below to download the plugin to a hub:

1. Close the Intel Unite® application if it is currently running on the hub device, then reopen it.
2. Verify that the package is downloading on the hub.

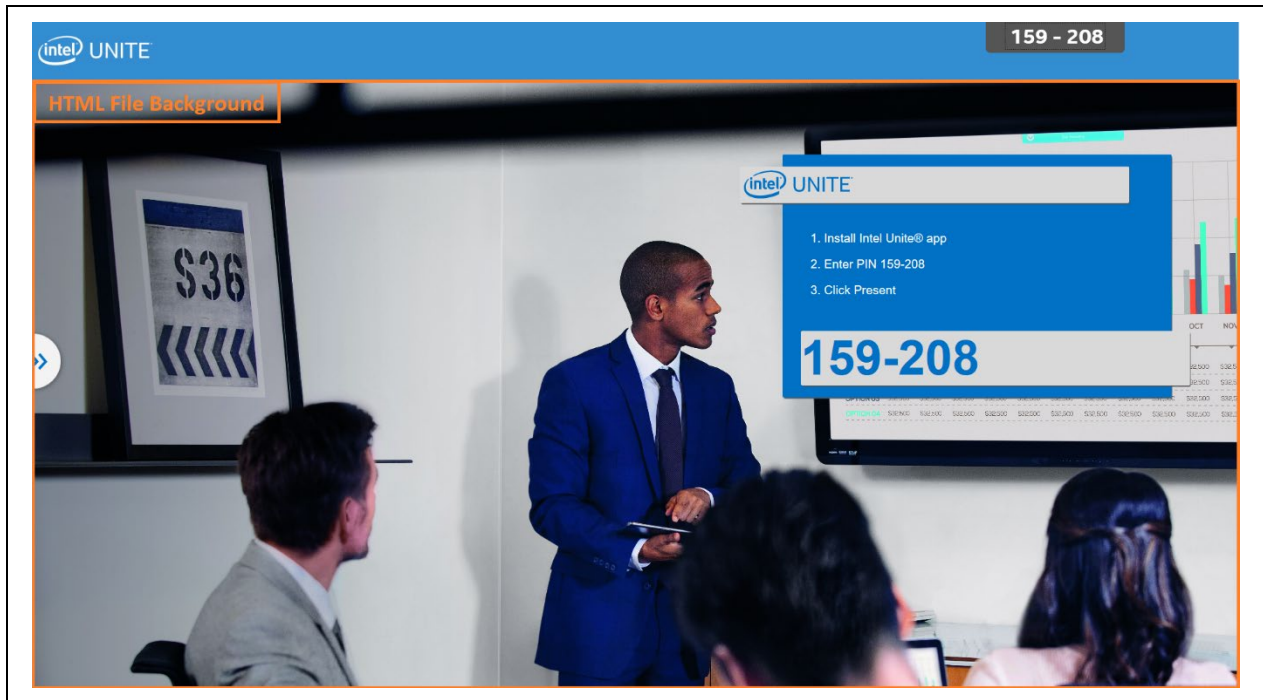
You will now see the live background instead of default Intel Unite® app background. [Figure 1](#) shows an example of a hub configured to display web page as the background, and [Figure 2](#) shows an example of a hub configured to display an HTML file; webpages and HTML files both display their content below the header, as delineated by the orange frames.

**Figure 1. Example of Intel Unite® Plugin for Live Background Using a Web Page URL**





**Figure 2. Example of Intel Unite® Plugin for Live Background Using an HTML File**



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## 4.0 Customize HTML Files for Live Background

The default HTML files provided are composed of the following files:

- `Index.html` – an HTML file including the content to be displayed as the background.
- `Index.css` – a Cascading Style Sheet (CSS) file that formats the color, position, fonts, and other visual styles of content included in the `Index.html` file.
- `Index.js` – a JavaScript\* file that performs the logic needed to receive hub background properties and PIN number in a JSON format, within two functions called `setBackgroundProperties()` and `setPinNumber()`. Optionally, third-party developers may fill out the behavior related to update graphic interface of their HTML file content, or to include any other logic of their choice.
- Optional image files and other assets.

### 4.1 HTML and CSS Files

The `index.html` and `index.css` files contain the background page content and layout styles and can be modified as desired by changing document `innerHTML` elements and styles from the `index.js`. The following hub properties are available to use in the `index.js` file:

**Table 3. Available HTML/CSS Properties**

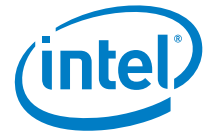
ID	Description
BackgroundColor	Background color
BackgroundImageUrl	Background image URL
BackgroundInstructions	Background instructions
BackgroundInstructionsColor	Background instructions color.
BackgroundInstructionsFont	Background instructions font
BackgroundInstructionsTitle	Background instructions title
IsBackgroundClockVisible	Make Background Clock visible
IsBackgroundVisible	Make background visible
IsBackgroundImageStretched	Stretch background image
pin	PIN number
PinColor	PIN color

### 4.2 JavaScript File

The `index.js` file contains the logic for the background properties. The Intel Unite® Plugin for Live Background formats the hub background properties in a JavaScript\* Object Notation (JSON\*) format, and invokes the following two JavaScript methods to load and update the properties in the HTML file:

- `setPinNumber()`
- `setBackgroundProperties()`

**Note:** If these two methods are missing from the `index.js` browsed document, properties will not be set or updated in your background. If your file to browse throws an exception or error while rendering, your background will fail to load in the hub, and the default hub background will be displayed instead.



Inside the `index.js` file, there is a variable named `corePropertiesName`, which contains the keys of the ten background properties received in JSON format. To change the behavior of the page according to the background properties, fill out the following functions provided in the `index.js` file:

- `setPin (pin)`
  - `setPinColor (property)`
  - `setInstructionsTitle (property)`
  - `setInstructions (property)`
  - `setIsBackgroundVisible (property)`
  - `setBackgroundInstructionsColor (property)`
  - `setBackgroundInstructionsFont (property)`
  - `setBackgroundColor (property)`
  - `setBackgroundImageUrl (property)`
  - `setIsBackgroundImageStretched (property)`
  - `setIsBackgroundClockVisible (property)`
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## 5.0 Technical Assumptions and Compatibility

The Intel Unite® Plugin for Live Background relies on Windows\* Presentation Foundation (WPF\*) [WebBrowser](#) framework element (located in [System.Windows.Controls](#) namespace) that uses an Internet Explorer\* (IE\*) rendering engine to run the scripts in the hub background, so the following registry keys must exist (currently both Hub and Client installers set this):

**Table 4. Registry Keys, Types, and Values**

Registry Key	Type	Value
Intel Unite Client.exe	DWORD	11000
Intel Unite Hub.exe	DWORD	11000
Intel.Unite.Module.Process.exe	DWORD	11000

For a 32-bit application on a 64-bit machine, the location of the registry keys is:

`Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer\Main\FeatureControl\FEATURE_BROWSER_EMULATION`

If you have matching platforms on the application and machine, the location of the registry keys is:

`Computer\HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Microsoft\Internet Explorer\Main\FeatureControl\FEATURE_BROWSER_EMULATION`

[WebBrowser](#) framework element renders content in IE 11 standard mode; so when rendering an HTML file, the last supported version of JavaScript\* is ES5.