

# vSphere Client (HTML5) and vSphere Web Client 6.5 FAQ (2147929)

<https://kb.vmware.com/s/article/2147929>

## General Questions

### 1. What is new with the clients in vSphere 6.5?

VMware announced in May 2016 that the Legacy C# Client (aka thick client, desktop client, or vSphere Client) will no longer be available with the vSphere 6.5 release. For more information, see [Goodbye vSphere Client for Windows \(C#\) – Hello HTML5](#).

The vSphere Web Client (Flash/Flex client) will be the client to manage vCenter Server 6.5 environment with all the features and plugins. In this release, VMware has made significant performance improvements and some user experience improvements to make this client much more functional. VMware has been transitioning away from the Legacy C# Client for the last several releases. In recent updates made to vSphere 6.0, VMware has continued moving functionality into the vSphere Web Client (such as Update Manager) which has further removed the need to run the Legacy C# client at all. In this release we are also releasing an HTML5 version of the vSphere Web Client and we are naming this the vSphere Client. This client will have a subset of features available in vSphere Web Client.

### 2. Is the vSphere Client (HTML5) that is part of vSphere 6.5 supported?

The subset of features available in the vSphere Client are supported. A feature request can be opened for feature(s) or functionality not currently present in the vSphere client.

### 3. What are the features that are available in HTML5 version of vSphere client?

vSphere Client (HTML5) has a subset of the features available in the vSphere Web Client. For more information on unavailable functionality, see [Functionality Updates for the vSphere Client](#).

With the recently released [vSphere 6.5 Update 1](#), the vSphere Client got even better and is now able to support most of the frequently performed operations. With each [iteration](#) of the vSphere Client additional improvements and functionality are being added. **By the time the vSphere Web Client is deprecated, the vSphere Client will be full featured but with significantly better responsiveness and usability.**

vSphere Client (HTML5) was released as a fling since March 2016 and has been releasing a new version every week. The best resource to verify if a feature is available is the [changelog](#) section of the Flings page. The vSphere Client released in vSphere 6.5 GA is using fling bits v2.7.

### 4. Will the Legacy C# Client still be available at all?

The Legacy C# Client will still be available with vSphere 6.0 and earlier versions that are not End of Life. For example, the Legacy C# Client will still be available and continue to work with vSphere 5.5 and 6.0. Starting vSphere 6.5 and later, the C# client will not be available.

Using the unsupported vSphere Client will fail on tasks with this error:

```
Error: 'details: object reference not set to an instance of an object'
```

### 5. When will the vSphere Web Client and/or the HTML5 vSphere Client be at full feature parity with the Legacy C# Client?

The vSphere Web Client (Flex/Flash version) is already ahead of the legacy C# client in terms of feature parity.

The vSphere Client (HTML5) version will take quite some time to achieve feature parity, and VMware is not able to project this at the moment. VMware has goals of having a better C# Client Replacement by the first half of

2016. This means that the vSphere Client would be a customer acceptable replacement in terms of features and performance. Explicitly, VMware is not stating this as feature parity with the Legacy C# Client. Progress can be seen on the Fling site as it develops, and is the best measure available. VMware encourages you to try the fling and give us feedback on any missing features which you would want to see sooner using the built-in feedback tool.

#### 6. What are the different clients available in the vSphere 6.5 and how can I access them?

- **vSphere Web Client** - Adobe Flex (<https://FQDN-or-IP-Address-of-VC/vsphere-client>)
- **vSphere Client** - HTML5 (<https://FQDN-or-IP-Address-of-VC/UI>)
- **Host Client** - HTML5 (<https://FQDN-or-IP-Address-of-ESXi-host/UI>) (available since vSphere 6.0 Update 2)
- **vSphere Appliance Management UI (VAMI)** - HTML5 (<https://FQDN-or-IP-Address-of-VCSA:5480>) (Only available in the vCenter Server Appliance)
- **PSC Management UI - HTML5** (available since vSphere 6.0 Update 1)
  - External PSC deployments (<https://FQDN-or-IP-Address-of-PSC/psc>)
  - Embedded PSC deployments (<https://FQDN-or-IP-Address-of-VCSA/psc>)

#### 7. Why is the vSphere Web Client a better choice than the Legacy C# Client?

The vSphere Web Client has the following benefits:

- **Scalability** – Handles more objects and more concurrent admin access.
- **Bookmarking URLs** - Allows quick return to specific objects or views and share them with others (such as in a support ticket, email, or instant message).
- **Recent Objects** - Navigate quickly between things you are working on.
- **Work-In-Progress** - Save your place in various wizards and come back to it later, even from another computer.
- **Enhanced Linked Mode** – View all of the vCenter Servers and inventory within an SSO Domain in one single interface.
- **Remembers user customizations to the UI** – Enables column selections, widths on grids, and portlets on summary pages.
- **Latest feature support** – The only interface that supports all new features including vSAN and NSX.
- **Cross platform** – The Legacy C# Client is limited to Windows platforms.
- **Ease of maintenance** – Unlike the Legacy C# Client, there is no need to upgrade individual instances of the client for every new release of vSphere. Also, vSphere Web Client plug-ins run server-side which simplifies plug-in maintenance.

#### 8. Is VMware really listening to its customers? Haven't you heard my feedback on the vSphere Web Client?

Yes, VMware is listening. The work being done on the vSphere Web Client plus the release of the ESXi Host Client are evidence that VMware is paying attention and listening to customer feedback. While VMware is working hard to exceed expectations for customers in the vSphere Web Client, VMware understands that some feel the move to a web-based administration tool is not in their best interests. For many customers who do not use Microsoft Windows as their primary operating system, this is a welcomed move. A web-based client also provides better scale, server-side plug-ins, and after VMware completes the conversion to HTML5, this gives the ability to manage the environment from any device – mobile, desktop, or tablet.

#### 9. Please explain further the technical reasons behind getting rid of the Legacy C# Client?

- **Does not scale per user:** The API calls that the Legacy C# Client makes exert a very heavy load on vCenter Server. A few dozen connections from the client can be enough to cripple the vCenter Servers performance.
- **Does not scale for vCenter Server churn/activity/tasks:** In order to maintain the Live Refresh behavior of the Legacy C# Client, it polls vCenter Server constantly. The more activity that occurs on the vCenter Server, the more processing that is required just for processing the UI for each user.
- **Does not scale for inventory:** Similar to the above point, if the inventory size is large enough, the Legacy C# Client will fail to load the inventory. Some of this is scalability in the way it displays information, but

it is also linked to the above, as more inventory means more churn to track, and even worse scaling.

- Tougher to maintain as customers have to upgrade each instance of the Legacy C# Client on each machine on which it is installed for every new release of vSphere.

#### 10. **My company does not allow us to use Browser based applications, what do I do now?**

Existing releases of vSphere are unaffected. For future releases, VMware is considering Electron, which would easily allow us to build a desktop application from the browser based client, without maintaining separate codebases. This is not currently available, but if you are interested please let us know.

#### 11. **What are my options if my company has a policy against using Flash applications or I generally prefer not to use them because of security and performance (or other reasons)?**

VMware agrees that flash is not the solution for the long-term. The long-term direction is to utilize HTML5. VMware has released an HTML5 version of the ESXi Host Client with vSphere 6.0U2 and later, and an HTML5 version of the vSphere Client in this release. Both these clients were released as flings before they were released as official products.

#### 12. **Has performance and overall usability been addressed in the vSphere Web Client?**

Performance and overall usability have been dramatically improved with the release of vSphere 6 Update 1 (released September 2015) and further improved with Update 2 (March 2016) and in vSphere 6.5 GA.

#### 13. **How will console access to virtual machines be offered in the vSphere Client?**

Just like in the current vSphere Web Client, two methods will continue to be offered for virtual machine console access:

- A lightweight HTML5 based Web Console accessed directly through the browser.
- The fully featured virtual machine Remote Console (VMRC) application.
- Additionally, vSphere virtual machines can be managed with the latest versions of VMware Workstation and VMware Fusion.

#### 14. **What about Client Integration Plug-in (CIP)?**

In vSphere 6.5, the vSphere Web Client will have no dependency on Client Integration Plug-in (as it exists today). For the Use Window Session Authentication functionality, you will need the new slimmed down Enhanced Authentication Plug-in, but the other functions (File upload/download, Deploy OVA/OVF) are replicated without CIP.

OVF deploy functionality has slightly changed with the removal of CIP. A user has to select all the related files of the OVF (.ovf, .mf, .vmdk unlike just the .ovf file before). This change is due to technical limitations on accessing local files by the browser.

Video on [vSphere Web Client after the Client Integration Plug-In Removal](#).

vSphere Client does not have OVF/OVA deploy functionalities yet, but does not require CIP for File upload/download features. OVF/OVA feature is a top priority and will soon be released in one of the fling releases.

#### 15. **What about stale data in the vSphere Web Client?**

VMware recognizes that the Legacy C# Client was used by a lot of customers to maintain a live view of inventory and status. This functionality is referred as Live Refresh, and recognize this is vitally important for administrators. VMware also recognizes that the vSphere Web Client has issues maintaining proper Live Refresh, sometimes not at all. VMware addressed most of the Live Refresh issues in the vSphere 6.5 release of vSphere Web Client and the vSphere Client. For example, virtual machine power states and tasks for all users now update in real time allowing the vSphere Web Client to act as a source of truth for the state of the environment.

**16. I understand that, just like the ESXi Host Client, the HTML5 vSphere Client Fling will be updated and available even after GA, will there be frequent supported (GA) releases of vSphere Client?**

Testing for the supported releases of the HTML5 vSphere Client will take some time after code is done (likely at least 1 month), and customers sit on a spectrum of how often they want to upgrade. This means supported releases will probably be on a roughly quarterly cadence, but VMware will continue to ship the Fling on a weekly basis. If new features or fixes are needed then updating to the latest version of the Fling would be a mechanism to consume those releases more quickly.

**17. Does the vSphere Client (HTML5) in 6.5 supports SAML or OAuth similar to vSphere Web Client?**

Yes, vSphere Client (HTML5) uses the same SSO vCenter login page and authentication mechanisms as that of vSphere Web Client.

### **Supported configurations/recommendations**

**1. What versions of ESXi and vCenter Server are supported for use with the vSphere Client?**

The vSphere Client released as part of vSphere 6.5 is a front-end for vCenter Server, and will have ESXi compatibility matching the vCenter Server versions. Currently the Fling works only with vCenter Server 6.0 and later (update releases and vCenter Server 6.5).

**2. How will the vSphere Client be deployed?**

In vSphere 6.5, the vSphere Client is part of the vCenter Server (both appliance and Windows Server) and is configured to work out of the box.

The HTML5 vSphere Client Fling on the other hand is deployed as a separate appliance for ease of delivery purposes.

**3. What are the list of supported browsers for the two web clients?**

The vSphere Web Client is supported on Chrome (latest and latest -1), Firefox (latest and latest -1), and IE10.0.19 and later (including IE11).

The vSphere Client (HTML5) is supported on the latest version on Chrome, Firefox and IE11+. Most of the functionality works in Safari and Edge but are still not recommended browsers (because Safari is not completely compliant with HTML5 standards). For more information on browser support for HTML5, see [how well does your browser support html5?](#)

**4. Different web browsers seem to behave differently with the vSphere Web Client. How is this being addressed in the future?**

HTML5 is a very stable standard now, and most of the browsers are adhering to it. There are small quirks in some browsers, but these are generally well known, and any major ones should be caught in compatibility testing. The different behavior with the vSphere Web Client (Flash) was often related to Client Integration Plug-in (working or not working) that is no longer used.

**5. If VMware would continue to release flings of the vSphere Client after the GA release, will those flings be supported?**

No, Flings are not supported by VMware, and the fling version of the vSphere Client (listed as HTML5 vSphere Client Fling) will stay unsupported.

**6. I would want to customize the background of the HTML5 client as light backgrounds are not good for my eyes. Is this feature available in the GA version?**

Theme customization is not available in the GA version. This request has been heard from multiple channels and

VMware is working on designing a solution for customization. As the vSphere Client is built using Javascript and CSS, one could edit the CSS file to get a darker theme but is completely unsupported.

**7. What is the recommended display resolution for a better user experience using the vSphere Client?**

1024x768 is the minimum supported resolution. The Customer Experience Improvement Program (CEIP) data shows 1920x1080 is a widely used resolution for vSphere Client and is the resolution VMware recommends for an optimal experience.

**8. I am on vSphere 5.5 and considering an upgrade but am not ready to go to 6.5 yet. What are my options to get to use HTML5 based vSphere Client?**

1. You can upgrade to 6.0 Update 2 release and use vSphere Client Fling (listed as HTML5 vSphere Client Fling). This is a simpler option of the two but this client is not supported as it is a fling.
2. You can upgrade the production vCenter Server to 6.0 U2 release and have a vCenter Server 6.5 in the same SSO domain in enhanced linked mode to use the supported GA version of the HTML5 based vSphere Client bundled with 6.5 vCenter Server. This will allow for the management of the inventory in the production 6.0 vCenter Server.

**9. I want to deploy the vSphere Client as a separate appliance as I do for the flings, can I get the same for the supported version of vSphere Client?**

VMware heard from many (~50%) customers that they would prefer client sitting outside of the vCenter Server, this option will not be supported for these reasons:

- o Increasing the supported topologies makes testing much more difficult
- o Complicating the embedded vCenter Server Appliance deployment will impact the simplicity of this configuration
- o Some of the benefits that customers want from this can be achieved in other ways (in place upgrade of only the vSphere Client service that does not affect the vCenter Server)

## Plug-ins

**1. I have a plug-in for the vSphere Web Client or I use a plug-in developed by VMware vendors. How can I migrate this plug-in to new HTML5 based vSphere Client?**

VMware is working with our partners (vendors) on this migration. Plug-ins that are built using the HTML bridge (part of the vSphere Web Client SDK released in 6.0 U2) can easily be made compatible with both the current vSphere Web Client and the vSphere Client. Around 30-40% of the partner plug-ins are already in HTML and VMware is working with the rest of the partner base to migrate them over to HTML.

HTML bridge plug-ins will be compatible with both the Flex Web Client and the HTML5 vSphere Client, offering an excellent transition path. VMware is currently working on support for these plug-ins within the HTML5 vSphere Client, and providing more documentation. If you want to get started with the HTML Bridge, follow these steps:

1. Download the SDK from [VMware Downloads](#).
2. Extract the file to local directory.
3. Open the `vsphere-client-sdk\html-bridge\Read Me First.html` file in any browser.

The latest HTML SDK which was released as part of the vSphere HTML5 Web Client Fling is available at [VSPHERE HTML5 WEB CLIENT](#).

**2. What about VMware Site Recovery Manager (SRM) and VMware Update Manager (VUM) plug-ins?**

The SRM plug-in has been web-only since version 5.8. With vSphere 6.0 Update 1, VUM also is fully available in the vSphere Web Client. Both plug-ins will be available in the HTML5 vSphere Client in the future.