

The Demise of Flash

Adobe Flash was once the best choice for building rich web applications, but as the Internet began to grow and technology advanced, Flash slowly started to die out. It reached the end of its life in December 2020. Released in 1996, Flash was once one of the most popular ways for people to stream videos and play games online. But it was plagued with security problems and failed to transition to the smartphone era.



Why was Flash popular?

When Flash was first released, the majority of internet users connected via dial-up connection that was very slow by today's standards. But Flash let web designers and animators deliver exciting content that could be downloaded relatively quickly. "You could make a three-minute animation with multiple characters, backgrounds, sounds and music, all using less than 2MB of data" explained animator David Firth. His surreal animations and characters – such as Salad Fingers, enjoyed viral success before the advent of social media. But Flash also let websites, like YouTube, stream high-quality video.

Why was Flash controversial?

The problems with Flash were that it was full of bugs, it crashed a lot, it was a constant security and privacy risk and needed constant updates. It didn't work on many mobile devices. It was a fossil, left over from the era of closed standards and corporate control of web technology. It was said that "Flash makes the web less accessible, and resists progress."

Flash also became expensive to maintain and support due to the constant crashes and bugs, and other software started to provide rich content.

The great fall of Flash

By 2009, Adobe claimed that Flash was installed on 99% of all internet-connected desktop PCs. But, at that time, the world was transitioning to mobile devices and Adobe was slow to react. "We optimised for lower-end phones with FlashLite," explains David Mendels, former executive vice president of products at Adobe. "It was very successful in places like Japan, but it wasn't the same as the full desktop Flash, and it wasn't fully compatible".

The beginning of the end of Flash was in 2007, with the release of the iPhone, which came equipped with a mobile Internet browser — but it did not support Adobe Flash. In 2010, Steve Jobs released an open letter on his thoughts about Flash: "I wanted to write some of my thoughts about Flash so that customers and critics can better understand why we don't allow Flash on iPhones, iPods and iPads". He said that Flash was cumbersome to use on a touchscreen, unreliable, a security threat and a drain on batteries. He said that videos and animations could be delivered using HTML5 and other open technologies, making Flash redundant on smartphones and tablets. "Adobe said that our decision was business-driven, they say that we want to protect our App Store, but in reality, it is based on technology issues. Adobe claims that we are a closed system, and that Flash is open, but in fact the opposite is true. New open standards created in the mobile era, such as HTML5, will win on mobile devices (and PCs too). Perhaps Adobe should focus more on creating HTML5 tools, and less on criticizing Apple".

By 2010, the internet had advanced. Big names like Facebook, Netflix and YouTube were already streaming videos to smartphones without Flash and in November 2011, Adobe ended development of Flash for mobile devices. It continued to produce Flash for desktop computers, but the software suffered from many security flaws.

In 2015, Apple disabled the Flash plug-in in the Safari web browser, and Google Chrome started blocking Flash content. In July 2017, Adobe announced that it would retire Flash in 2020. It said other technologies, such as HTML5, had matured enough to provide a "viable alternative", without requiring users to install and update a dedicated plug-in.

Adobe stopped distribution and support of Flash in December, 2020, and stopped videos and animations running in its Flash Player from January, 2021.

What happens to all the old animations?

Since Adobe has prevented Flash Player from displaying content since January, 2021, there are concerns that years of animations, games and interactive websites will be lost. Gaming company Zynga closed its FarmVille online video game after 11 years, because it depended on Flash to run. An open, collaborative project known as "Ruffle" is now working to develop software that can play Flash content in a web browser, without requiring a plug-in (see <https://ruffle.rs/>).

The end of an era

In its final update, Adobe said: "We want to take a moment to thank all of our customers and developers who have used and created amazing Flash Player content over the last two decades. We are proud that Flash had a crucial role in evolving web content for animation, interactivity, audio and video".

Adobe has provided instructions on how to remove Flash from Windows and Mac computers on its website, and has warned: "Not uninstalling Flash Player from your computer will leave a security vulnerability in your system."

Source: <https://www.bbc.com/news/technology-55497353>

