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= Steam (software) =
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Steam is a digital distribution platform developed by Valve Corporation offering digital rights management (DRM) , multiplayer gaming and social networking services . Steam provides the user with installation and automatic updating of games on multiple computers , and community features such as friends lists and groups , cloud saving , and in @-@ game voice and chat functionality . The software provides a freely available application programming interface (API) called Steamworks , which developers can use to integrate many of Steam 's functions into their products , including networking , matchmaking , in @-@ game achievements , micro @-@ transactions , and support for user @-@ created content through Steam Workshop .

Though initially developed for use on Microsoft Windows , versions for OS X and Linux operating systems were later released . Applications whose main functions are chatting and shopping have also been released for iOS and Android mobile devices . The Steam website also replicates much of the storefront and social network features of the stand @-@ alone application .

As of September 2015 , there are 6 @,@ 464 Windows games , 2 @,@ 323 OS X games , and 1 @,@ 500 Linux games available on Steam . The service has over 125 million registered accounts . Steam has had as many as 12 @.@ 5 million concurrent users as of November 2015 . The Steam platform is considered to be the largest digital distribution platform for PC gaming ; in November 2009 , Stardock estimated it at 70 % and then later , in October 2013 , it was estimated by Screen Digest that 75 % of games bought online were downloaded through Steam . In 2015 , users purchased titles through Steam or through Steam keys from third @-@ party vendors totaling around \$ 3 @.@ 5 billion representing 15 % of the global PC game sales for the year , based on estimations made by the tracking website Steam Spy . The success of the Steam platform has led to the development of a line of Steam Machine micro @-@ consoles and personal computers meeting minimum specifications , and SteamOS , a Linux @-@ based operating system built around the Steam client .

= = History = =

= = = Initial release = = =

Before implementing Steam , Valve Corporation had problems updating its online games , such as Counter @-@ Strike ; providing patches would result in most of the online user base disconnecting for several days . Valve decided to create a platform that would update games automatically and implement stronger anti @-@ piracy and anti @-@ cheat measures . Valve also recognized , through user polls at the time of its announcement in 2002 , that at least 75 % of their users had access to high @-@ speed Internet connections , which would only grow with planned Internet expansion in the following years , and recognized that they could deliver game content faster to players than through retail channels . Valve approached several companies , including Microsoft , Yahoo ! , and RealNetworks to build a client with these features , but were declined .

Steam 's development began in 2002 . Working titles for the product included " Grid " and " Gazelle " . It was first revealed to the public on March 22 , 2002 , at the Game Developers Conference , where it was presented purely as a distribution network . To demonstrate the ease of integrating Steam with a game , Relic Entertainment created a special version of Impossible Creatures . However , the game was not released on Steam until 2015 . Valve partnered with several companies , including AT & T , Acer , and GameSpy Industries . The first mod released on the system was Day of Defeat .

The Steam client was first made available for public beta testing in January 2003 during the beta period for Counter @-@ Strike 1 @.@ 6, for which it was mandatory to install and use. At the time, Steam 's primary function was streamlining the patch process common in online computer games. Steam was an optional component for all other games. 80 @,@ 000 ? 300 @,@ 000 gamers tested the system when it was in its beta period. The system and website choked under the strain of

thousands of users simultaneously attempting to play the latest version of Counter @-@ Strike . In 2004 , the World Opponent Network was shut down and replaced by Steam . The online features of games which required World Opponent Network ceased to work unless they were converted to Steam .

Around that time, Valve began negotiating contracts with several publishers and independent developers to release their products, including Rag Doll Kung Fu and Darwinia, on Steam. Canadian publisher Strategy First announced in December 2005 that it would partner with Valve for digital distribution of current and future titles. In 2002, the managing director of Valve, Gabe Newell, said he was offering mod teams a game engine license and distribution over Steam for US \$ 995. Valve 's Half @-@ Life 2 was the first game to require installation of the Steam client to play, even for retail copies. This decision was met with concerns about software ownership, software requirements, and issues with overloaded servers demonstrated previously by the Counter @-@ Strike rollout. During this time users faced multiple issues attempting to play the game.

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= = = Profitability = = =
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Beginning with Rag Doll Kung Fu in October 2005, third @-@ party games became available for purchase and download on Steam, and Valve announced that Steam had become profitable because of some highly successful Valve games. Although digital distribution could not yet match retail volume, profit margins for Valve and developers were far larger on Steam. Large developer @-@ publishers, including id Software, Eidos Interactive, and Capcom, began distributing their games on Steam in 2007. By May that year, 13 million accounts had been created on the service, and 150 games were for sale on the platform.

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= = Client functionality = =
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= = = Software delivery and maintenance = = =

Steam 's primary service is to allow its users to download games and other software that they have in their virtual software libraries to their local computers as game cache files (GCFs) . Steam provides digital rights management (DRM) for software titles by providing " custom executable generation " for executable files that are unique for each user; this allows the user to install the software on multiple computing devices via Steam or through software backups without limitations . The user is required to be running Steam while connected to the Internet for authentication prior to playing a game or have previously set up Steam in an " offline " mode while connected to the Internet , storing their credentials locally to allow play without an Internet connection . Steam 's DRM is available to software developers through Steamworks; the service allows developers and publishers to include other forms of DRM and other authentication services than Steam; for example , some games on Steam require the use of Games for Windows? Live and some titles from publisher Ubisoft require the use of their UPlay gaming service .

In September 2008, Valve added support for Steam Cloud, a service that can automatically store saved game and related custom files on Valve 's servers; users can access this data from any machine running the Steam client. Games must use the appropriate features of Steamworks for Steam Cloud to work. Users can disable this feature on a per @-@ game and per @-@ account basis. In May 2012, the service added the ability for users to manage their game libraries from remote clients, including computers and mobile devices; users can instruct Steam to download and install games they own through this service if their Steam client is currently active and running. Some games sold through retail channels can be redeemed as titles for users ' libraries within Steam by entering a product code within the software. For games that incorporate Steamworks, users can buy redemption codes from other vendors and redeem these in the Steam client to add the title to their libraries. Steam also offers a framework for selling and distributing downloadable content (DLC) for games.

In September 2013, Steam introduced the ability to share most games with family members and close friends by authorizing machines to access one 's library. Authorized players can install the game locally and play it separately from the owning account. Users can access their saved games and achievements providing the main owner is not playing. When the main player initiates a game while a shared account is using it, the shared account user is allowed a few minutes to either save their progress and close the game or purchase the game for his or her own account. Within Family View, introduced in January 2014, parents can adjust settings for their children 's tied accounts, limiting the functionality and accessibility to the Steam client and purchased titles.

In accordance with its Acceptable Use Policy , Valve retains the right to block and unblock customers 'access to their games and Steam services when Valve 's Anti @-@ Cheat (VAC) software determines that the user is cheating in multiplayer games , selling accounts to others or trading games to exploit regional price differences . Blocking such users initially removed access to his or her other games , leading to some users with high @-@ value accounts losing access because of minor infractions of the AUP . Valve later changed its policy to be similar to that of Electronic Arts 'Origin platform , in which blocked users can still access their games but are heavily restricted , limited to playing in offline mode and unable to participate in Steam Community features . Customers also lose access to their games and Steam account if they refuse to accept changes to Steam 's end user license agreements ; this occurred in August 2012 . In April 2015 , Valve added Game Bans to its service , allowing developers to set bans on players for their games but enacted and enforced at the Steam level , allowing developers to police their own gaming communities in customizable manner .

= = = Storefront features = = =

The Steam client includes a digital storefront called the Steam Store through which users can purchase computer games. Once the game is bought, a software license is permanently attached to the user 's Steam account, allowing him or her to download the software on any compatible device. Game licenses can be given to other accounts under certain conditions. Content is delivered from an international network of servers using a proprietary file transfer protocol . Steam sells its products in US and Canadian dollars, euros, pounds sterling, Brazilian reais, Russian rubles, Indonesian rupiah and Indian rupees depending on the user 's location. From December 2010, the client supports the Webmoney payment system, which is popular in many European, Middle Eastern, and Asian countries. Starting in April 2016, Steam began accepting payments in Bitcoin, valued based on the user 's geolocation, with transactions handled by BitPay. The Steam storefront validates the user 's region; the purchase of titles may be restricted to specific regions because of release dates, game classification, or agreements with publishers. Since 2010, the Steam Translation Server project offers Steam users to assist with the translation of the Steam client , storefront, and a selected library of Steam games for twenty @-@ seven languages. Steam also allows users to purchase downloadable content for games, and for some specific game titles such as Team Fortress 2, the ability to purchase in @-@ game inventory items. In February 2015, Steam began to open similar options for in @-@ game item purchases for third @-@ party games. The Steam store also enables users to redeem store product keys to add software from their library

. The keys are sold by third @-@ party providers such as Humble Bundle (in which a portion of the sale is given back to the publisher or distributor), distributed as part of a physical release to redeem the game, or given to a user as part of promotions, often used to deliver Kickstarter and other crowd funding rewards. There has been a grey market around Steam keys, where less reputable buyers purchase a large number of Steam keys for a game when it is offered for a low cost, and then resell these keys to users or other third @-@ party sites at a higher price, generating profit for themselves. This has caused some of these third @-@ party sites, like G2A, to be embroiled in this grey market. It is possible for publishers to have Valve to track down where specific keys have been used and cancel them, removing the product from the user 's libraries, leaving the user to seek any recourse with the third @-@ party they purchased from. Other legitimate storefronts, like Humble Bundle, have set a minimum price that must be spent to obtain Steam keys as to

discourage mass purchases that would enter the grey market.

In 2013 , Steam began to accept player reviews of games . Other users can subsequently rate these reviews as helpful , humorous , or otherwise unhelpful , which are then used to highlight the most useful reviews on the game 's Steam store page . Steam will also aggregate these reviews and enable users to sort products based on this feedback while browsing the store . In May 2016 , Steam further broke out these aggregations between all reviews overall and those made more recently in the last 30 days , a change Valve acknowledges to how game updates , particularly those in Early Access , can alter the impression of a game to users .

During mid @-@ 2011 . Valve began to offer free @-@ to @-@ play games , such as Global Agenda, Spiral Knights and Champions Online; this offer was linked to the company 's move to make Team Fortress 2 a free @-@ to @-@ play title . Valve included support via Steamworks for microtransactions for in @-@ game items in these titles through Steam 's purchasing channels, in a similar manner to the in @-@ game store for Team Fortress 2. Later that year, Valve added the ability to trade in @-@ game items and " unopened " game gifts between users . Steam Coupons , which was introduced in December 2011, provides single @-@ use coupons that provide a discount to the cost of items. Steam Coupons can be provided to users by developers and publishers; users can trade these coupons between friends in a similar fashion to gifts and in @-@ game items. Steam Market, a feature introduced in beta in December 2012 that would allow users to sell virtual items to others via Steam Wallet funds, further extended the idea. Valve levies a transaction fee of 15 % on such sales and game publishers that use Steam Market pay a transaction fee . For example , Team Fortress 2 ? the first game supported at the beta phase ? incurred both fees. Full support for other games was expected to be available in early 2013. In April 2013, Valve added subscription @-@ based game support to Steam; the first game to use this service was Darkfall Unholy Wars.

In October 2012, Steam introduced non @-@ gaming applications, which will be sold through the service. Creativity and productivity applications can access the core functions of the Steamworks API, allowing them to use Steam 's simplified installation and updating process, and incorporate features including cloud saving and Steam Workshop. Developers of non @-@ gaming software may submit their applications to the Steam Greenlight service to judge interest for later inclusion on the Steam storefront. The Steam store allows game soundtracks to be purchased to be played via Steam Music or integrated with the user 's other media players. Valve has also added the ability for publishers to rent and sell digital movies via the service, with initially most being video game documentaries. Following Warner Bros. Entertainment offering the Mad Max films alongside the September 2015 release of the 2015 video game based on the series, Lionsgate entered into agreement with Valve to rent over one hundred feature films from its catalog through Steam starting in April 2016, with more films to follow later. With the onset of Steam Machines as announced in March 2015, the Steam storefront also includes the ability to purchase Steam Machine @-@ related hardware via the Steam store.

In conjunction with developers and publishers, Valve frequently provides discounted sales on games on a daily and weekly basis, sometimes oriented around a publisher or genre theme, and may allow games to be played for free during the days of these sales. The site had offered a large selection of games at discount during its annual Summer and Holiday sales, including gamification of these sales to incentive users to purchase more games.

= = = = Storefront policies = = = =

In June 2015, Valve created a formal process to allow purchasers to request full refunds on games they had purchased on Steam for any reason, with refunds guaranteed within the first two weeks and if the player had not spent more than two hours in the game. Prior to June 2015, Valve has had a no @-@ refunds policy but in some circumstances it has offered refunds if third @-@ party content fails to work or improperly reports on certain features. For example, the Steam version of From Dust was originally stated to have a single, post @-@ installation online DRM check with its publisher Ubisoft, but the released version of the game required a DRM check with Ubisoft 's

servers each time it was used . At the request of Ubisoft , Valve offered refunds to customers who bought the game while Ubisoft worked to release a patch that would remove the DRM check altogether . On The War Z 's release , players found that the game was still in an alpha @-@ build state and lacked many of the features advertised on its Steam store page . Though the developers Hammerpoint Interactive altered the description after launch to reflect the current state of the game software , Valve removed the title from sale and offered refunds to those who had bought it . Valve also removed Earth : Year 2066 from the Early Access program and offered refunds after discovering that the game 's developers had reused assets from other games and used developer tools to erase negative complaints about the title . The lack of a formal refund policy led the Australian Competition and Consumer Commission to sue Valve in 2014 for a violations of Australian consumer laws that required stores to offer refunds for faulty or broken products . The Commission won the lawsuit in March 2016 , though recognizing Valve changed its policy in the interim , with fines to be determined at a later date .

Valve will remove games if they no longer meet Valve 's business terms for developers . Grand Theft Auto : Vice City was removed from Steam because of a claim from the Recording Industry Association of America over an expired license for one of the songs on the soundtrack . Near the launch of Electronic Arts ' (EA) own digital storefront Origin , Valve removed Crysis 2 and Dragon Age II from Steam because the terms of service prevented games from having their own in @-@ game storefront for downloadable content . In the case of Crysis 2 , a " Maximum Edition " that contained all the available downloadable content for the game and removed the in @-@ game storefront was re @-@ added to Steam . Valve will also remove games that are formally stated to be violating copyright or other intellectual property when given such complaints . In June 2016 , Valve removed Orion by Trek Industries when Activision filed a Digital Millennium Copyright Act (DMCA) complaint about the game after it was discovered that one of the game 's artists had taken , among other assets , gun models directly from Call of Duty : Black Ops 3 and Call of Duty : Advanced Warfare . Games that are removed can still be downloaded and played by those that have already purchased these titles .

= = = Security = = =

The popularity of Steam has led to the service 's being attacked by hackers in the past . A notable attempt occurred on November 6 , 2011 , when Valve temporarily closed the community forums , citing potential hacking threats to the service . On November 10 , Valve reported that the hack had compromised one of its customer databases , potentially allowing the perpetrators to access customer information ? including encrypted password and credit card details . At that time , Valve was not aware whether the intruders actually accessed this information or discovered the encryption method , but nevertheless warned users to be alert for fraudulent activity .

Valve added Steam Guard functionality to the Steam client in March 2011 to protect against the hijacking of accounts via phishing schemes , one of the largest support issues Valve had at the time . Steam Guard was advertised to take advantage of the identity protection provided by Intel 's second @-@ generation Core processors and compatible motherboard hardware , which allows users to lock their account to a specific computer . Once locked , activity by that account on other computers must first be approved by the user on the locked computer . Support APIs for Steam Guard are available to third @-@ party developers through Steamworks . Steam Guard also offers two @-@ factor , risk @-@ based authentication that uses a one @-@ time verification code sent to a verified email address associated with the Steam account ; this was later expanded to include two @-@ factor authentication through the Steam mobile application , known as Steam Guard Mobile Authenticator . If Steam Guard is enabled , the verification code is sent each time the account is used from an unknown machine .

By 2015, between Steam @-@ based game inventories, trading cards, and other virtual goods attached to a user 's account, Valve has stated that the potential monetary value has drawn hackers to try to access user accounts for financial benefit, and continue to encourage users to secure accounts with Steam Guard; when trading was introduced in 2011. Valve reported that in

December 2015 , around 77 @,@ 000 accounts per month are hijacked , enabling the hijackers to empty out the user 's inventory of items through the trading features . At that time , the company announced that in an effort to improve security , new restrictions would be added in March 2016 under which 15 @-@ day holds will be placed on traded items unless they activate , and authenticate with Steam Guard Mobile Authenticator .

ReVuln , a commercial vulnerability research firm , published a paper in October 2012 that said the Steam browser protocol was posing a security risk by enabling malicious exploits through a simple user click on a maliciously crafted steam : / / URL in a browser . The report was taken up by various online publications . This was the second serious vulnerability of gaming @-@ related software following a recent problem with Ubisoft 's copy protection system " Uplay " ; the German IT platform " Heise online " recommended strict separation of gaming and sensitive data , for example using a PC dedicated to gaming , gaming from a second Windows installation , or using a computer account with limited rights dedicated to gaming .

In July 2015 , a bug in the software allowed anyone to reset the password to any account by using the "forgot password" function of the client . High profile professional gamers and streamers lost access to their accounts . In December 2015 , Steam 's content delivery network was misconfigured in response to a DDoS attack , causing cached store pages containing personal information to be temporarily exposed for 34 @,@ 000 users .

= = = User interface = = =

Since November 2013, Steam allows for users to review their purchased titles and organize them into categories set by the user and add to favorite lists for guick access. Players can add non @-@ Steam games to their libraries, allowing the game to be easily accessed from the Steam client and providing support where possible for Steam Overlay features . The Steam interface allows for user @-@ defined shortcuts to be added. In this way, third @-@ party modifications and games not purchased through the Steam Store can use Steam features. Valve sponsors and distributes some modifications free @-@ of @-@ charge; and modifications that use Steamworks can also use VAC , Friends , the server browser , and any Steam features supported by their parent game . For most games launched from Steam, the client provides an in @-@ game overlay that can be accessed by a keystroke . From the overlay , the user can access his or her Steam Community lists and participate in chat, manage selected Steam settings, and access a built @-@ in web browser without having to exit the game. Since the beginning of February 2011 as a beta version, the overlay also allows players to take screenshots of the games in process; it automatically stores these and allows the player to review, delete, or share them during or after his or her game session . As a full version on February 24, 2011, this feature was reimplemented so that users could share screenshots on websites of Facebook, Twitter, and Reddit straight from a user 's screenshot manager.

Steam 's " Big Picture " mode was announced in 2011; public betas started in September 2012 and were integrated into the software in December 2012. Big Picture mode is a 10 @-@ foot user interface, which optimizes the Steam display to work on high @-@ definition televisions, allowing the user to control Steam with a gamepad or with a keyboard and mouse. Newell has stated that Big Picture mode is a step towards a dedicated Steam entertainment hardware unit. SteamVR, a virtual reality (VR) Big Picture interface, was introduced in beta in January 2014. The SteamVR mode enables the user to operate the Big Picture mode and play any game in their Steam library with a virtual theater displayed through the VR headset, the equivalent of looking at a 225 @-@ inch television screen, according to Valve. The mode was first introduced in beta for the Oculus Rift headset and later expanded in March 2015 to support the HTC Vive, a VR unit developed jointly with Valve, with the feature to be publicly released shortly after the Vive 's public launch in April 2016. In @-@ Home Streaming was introduced in May 2014; this allows users to stream games installed on one computer to another? regardless of platform? on the same home network.

The Steam client, as part of a social network service, allows users to identify friends and join groups using the Steam Community feature. Users can use text chat and peer @-@ to @-@ peer

VoIP with other users, identify which games their friends and other group members are playing, and join and invite friends to Steamworks @-@ based multiplayer games that support this feature. Users can participate in forums hosted by Valve to discuss Steam games. Each user has a unique page that shows his or her groups and friends, game library including earned achievements, game wishlists, and other social features; users can choose to keep this information private. In January 2010, Valve reported that 10 million of the 25 million active Steam accounts had signed up to Steam Community. In conjunction with the 2012 Steam Summer Sale, user profiles were updated with Badges reflecting the user 's participation in the Steam community and past events . Steam Trading Cards were introduced in beta in May 2013 and were fully supported by June 2013. By playing specific games, players would earn virtual trading cards, which they could trade with friends and use towards gaining rewards on the service such as game discounts, downloadable content, or in @-@ game items, and customize their user profile page. The Steam client has become an OpenID provider, allowing third @-@ party websites to use a Steam user 's identity without requiring the user to expose his or her Steam credentials. In order to prevent abuse, access to most community features is restricted until a one @-@ time payment of at least US \$ 5 is made to Valve. This requirement can be fulfilled by making any purchase of US \$ 5 or more on Steam, or by adding at least US \$ 5 to the wallet.

Through Steamworks , Steam provides a means of server browsing for multiplayer games that use the Steam Community features , allowing users to create lobbies with friends or members of common groups . Steamworks also provides Valve Anti @-@ Cheat (VAC) , Valve 's proprietary anti @-@ cheat system ; game servers automatically detect and report users who are using cheats in online , multiplayer games . In August 2012 , Valve added new features ? including dedicated hub pages for games that highlight the best user @-@ created content , top forum posts , and screenshots ? to the Community area . In December 2012 , a feature called Game Guides , where users can upload text and images detailing games and game strategies in the same manner as GameFAQs was added . Starting in beta in December 2014 and publicly released in January 2015 , the Steam client allows players to broadcast video streams to the public or Steam friends while playing video games .

In September 2014, Steam Music, a built @-@ in music player, was added to the Steam client, allowing users to play through music stored on their computer or to stream from a locally networked computer.

= = = Developer features = = =

Valve offers Steamworks , an application programming interface (API) that provides development and publishing tools to take advantage of Steam client 's features , free @-@ of @-@ charge to game and software developers . Steamworks provides networking and player authentication tools for both server and peer @-@ to @-@ peer multiplayer games , matchmaking services , support for Steam community friends and groups , Steam statistics and achievements , integrated voice communications , and Steam Cloud support , allowing games to integrate with the Steam client . The API also provides anti @-@ cheating devices and digital copy management . Developers of software available on Steam are able to track sales of their titles through the Steam store . In February 2014 , Valve announced that it will allow developers to set up their own sales for their titles independent of any sales that Valve may set for titles .

Steam Greenlight , announced in July 2012 and released the following month , is a way for Steam users to help choose which games are added to the service . Developers are able to submit information about their games , as well as early builds or beta versions , for consideration by users . Users can pledge support for these games , and Valve will help to make top @-@ pledged games available on the Steam service . In response to complaints during its first week that finding games to support was made difficult by a flood of inappropriate or false submissions , Valve required developers to pay US \$ 100 to list a game on the service to reduce illegitimate submissions . The fee will be donated to the charity Child 's Play . A later modification allowed developers to put conceptual ideas on the Greenlight service to garner interest in potential projects free @-@ of @-@

charge; votes from such projects are only visible to the developer. Valve also allowed non @-@ gaming software to be voted onto the service through Greenlight.

The first game to be released via Steam Greenlight was McPixel . The initial process offered by Steam Greenlight was panned because while developers favored the concept , the rate of games that are eventually approved by Valve is very small . Valve has acknowledged that this is a problem and believes it can improve upon it ; Valve 's Tom Bui said , " we aren 't where we want to be yet " . In January 2013 , Newell stated that Valve recognized that its role in Greenlight has been perceived as a bottleneck , something it plans to eliminate in the future through an open marketplace infrastructure . On the eve of Greenlight 's first anniversary , Valve simultaneously approved 100 titles through the Greenlight process to demonstrate this change of direction . Valve stated in January 2014 that it plans to phase out the Greenlight process in favor of providing developers with easier means to put their games onto the Steam service . The September 2014 " Discovery Update " added tools that would allow existing Steam users to be curators for game recommendations , and sorting functions that presented more popular titles and recommended titles specific to the user , as to allow more games to be introduced on Steam without the need of Steam Greenlight , while providing some means to highlight user @-@ recommended games .

Valve added the ability for developers to sell games under an early access model with a special " Early Access " section of the Steam store , starting in March 2013 . This program allows developers to release functional but yet @-@ incomplete products such as beta versions to the service to allow users to buy the titles and help provide testing and feedback towards the final production . Early access also helps to provide funding to the developers to help complete their titles .

= = = Steam Workshop = = =

The Steam Workshop is a Steam account @-@ based hosting service for videogame user @-@ created content. Depending on the title, new levels, art assets, gameplay modifications, or other content may be published to or installed from the Steam Workshop through an automated, online account @-@ based process. The Workshop was originally used for distribution of new items for Team Fortress 2; it was redesigned to extend support for any game, including modifications for The Elder Scrolls V: Skyrim, in early 2012. A May 2012 patch for Portal 2, enabled by a new map @-@ making tool through the Steam Workshop, introduced the ability to share user @-@ created levels. Independently @-@ developed games, including Dungeons of Dredmor, are able to provide Steam Workshop support for user @-@ generated content. Dota 2 became Valve 's third published title available for the Steam Workshop in June 2012; its features include customizable accessories, skins, and voice packs.

Valve has provided some user @-@ developed Workshop content as paid @-@ for features in Valve @-@ developed games, including Team Fortress 2 and DOTA 2; as of January 2015, over \$ 57 million has been paid to content creators using the Workshop. Valve began allowing developers to use these advanced features in January 2015; the developer and content generator will share the profits of the sale of these items; the feature went live in April 2015, starting with various mods for Skyrim. This feature was pulled a few days afterward following negative user feedback and reports of pricing and copyright misuse. Valve has stated they are still interested in offering this type of functionality in the future, but will review the implementation to avoid these previous mistakes. In November 2015, the Steam client was updated with the ability for game developers to offer in @-@ game items for direct sale via the store interface. The first game to use the item store was Rust in 2015.

= = = Steam for Schools = = =

Steam for Schools is a function @-@ limited version of the Steam client that is available free @-@ of @-@ charge to educational institutions for use in classrooms. It is part of Valve 's initiative to support gamification of learning for classroom instruction; it was released alongside free versions of Portal 2 and a standalone program called "Puzzle Maker " that allows teachers and students to

create and manipulate levels . It features additional authentication security that allows teachers to share and distribute content via a Steam Workshop @-@ type interface but blocks access from students .

= = Supported platforms = =

Steam was released in 2003 exclusively for the Microsoft Windows operating system but has since been expanded to other platforms .

On March 8 , 2010 , Valve announced that Steam was developing a client for OS X. The announcement was preceded by a change in the Steam beta client to support the cross @-@ platform WebKit web browser rendering engine instead of the Trident engine of Internet Explorer . Before this announcement , Valve teased the release by e @-@ mailing several images to Mac community and gaming websites ; the images featured characters from Valve games with Apple logos and parodies of vintage Macintosh advertisements . Valve developed a full video homage to Apple 's 1984 Macintosh commercial to announce the availability of Half @-@ Life 2 and its episodes on the service ; some concept images for the video had previously been used to tease the Mac Steam client .

Steam for OS X was originally planned for release in April 2010; it was launched worldwide on May 12, 2010, following a successful beta period. In addition to the Steam client, several features were made available to developers, allowing them to take advantage of the cross @-@ platform Source engine, and platform and network capabilities using Steamworks. Through SteamPlay, the OS X client allows players who have purchased compatible products in the Windows version to download the Mac versions at no cost, allowing them to continue playing the game on the other platform. Some third @-@ party titles may require the user to re @-@ purchase them to gain access to the cross @-@ platform functionality. The Steam Cloud is cross @-@ platform compatible. Multiplayer games can also be cross @-@ compatible, allowing Windows and Mac players to play with each other.

= = = Linux = = =

Valve announced in July 2012 that it was developing a Steam client for Linux and modifying the Source engine to work natively on Linux , based on the Ubuntu distribution . This announcement followed months of speculation , primarily from the website Phoronix that had discovered evidence of Linux developing in recent builds of Steam and other Valve software . Newell stated that getting Steam and games to work on Linux is a key strategy for Valve ; Newell called the closed nature of Microsoft Windows 8 , " a catastrophe for everyone in the PC space " , and that Linux would maintain " the openness of the platform " . Valve is extending support to any developers that want to bring their games to Linux , by " making it as easy as possible for anybody who 's engaged with us ? putting their games on Steam and getting those running on Linux " , according to Newell .

The team developing the Linux client had been working for a year before the announcement to validate that such a port would be possible . As of the official announcement , a near @-@ feature @-@ complete Steam client for Linux had been developed and successfully run on Ubuntu . Internal beta testing of the Linux client started in October 2012 ; external beta testing occurred in early November the same year . Open beta clients for Linux were made available in late December 2012 , and the client was officially released in mid @-@ February 2013 . Valve 's Linux group will focus on improving the Steam client and will assure that its selected first Source game , Left 4 Dead 2 , will run at an acceptable frame rate and degree of connectivity with the Windows and OS X versions . From there , it will work on porting other games to Ubuntu and expanding to other Linux distributions . In early August 2012 , Valve said it had successfully completed the Left 4 Dead 2 port . Following Valve 's announcement , Devolver Digital announced that it will port Serious Sam 3 : BFE with

Steamworks support to the Ubuntu Linux distribution . Linux games will also be eligible for SteamPlay availability; The Cave was announced as one of the first titles to take advantage of this . Versions of Steam working under Fedora and Red Hat Enterprise Linux were released by October 2013 . On June 5 , 2014 , the number of Linux @-@ compatible games on Steam reached 500 while on March 11 , 2015 the number of native games available via Steam for Linux / SteamOS had surpassed 1000 .

= = = Consoles = = =

At E3 2010 , Newell announced that Steamworks would arrive on the PlayStation 3 with Portal 2 . It would provide automatic updates , community support , downloadable content and other unannounced features . Steamworks made its debut on consoles with Portal 2 's PlayStation 3 release . Several features ? including cross @-@ platform play and instant messaging , Steam Cloud for saved games , and the ability for PS3 owners to download Portal 2 from Steam (Windows and Mac) at no extra cost ? were offered . Valve 's Counter @-@ Strike : Global Offensive also supports Steamworks and cross @-@ platform features on the PlayStation 3 , including using keyboard and mouse controls as an alternative to the gamepad . Valve said it " hope [s] to expand upon this foundation with more Steam features and functionality in DLC and future content releases "

The Xbox 360 does not have support for Steamworks . Newell said that they would have liked to bring the service to the console through the game Counter @-@ Strike : Global Offensive , which would have allowed Valve to provide the same feature set that it did for the PlayStation 3 , but later said that cross @-@ platform play would not be present in the final version of the game . Valve attributes the inability to use Steamworks on the Xbox 360 to limitations in the Xbox Live regulations of the ability to deliver patches and new content . Valve 's Erik Johnson stated that Microsoft requires that new content must be certified and validated before distribution , which would limit the usefulness of Steamworks ' delivery approach .

= = = Mobile platforms = = =

Valve released an official Steam client for iOS and Android devices in late January 2012, following a short beta period. The application allows players to log in to their accounts to browse the storefront, manage their games, and communicate with friends in the Steam community. The application also incorporates a two @-@ factor authentication system that works with Steam Guard, further enhancing the security of a user 's account. Newell stated that the application was a strong request from Steam users and sees it as a means " to make [Steam] richer and more accessible for everyone ". A mobile Steam client for Windows Phone devices was released in June 2016.

= = = Steam Machine = = =

Prior to 2013, industry analysts believed that Valve was developing hardware and tuning features of Steam with apparent use on its own hardware. These computers were pre @-@ emptively dubbed as " Steam Boxes " by the gaming community and expected to be a dedicated machine focused upon Steam functionality and maintaining the core functionality of a traditional video game console. During the week beginning on September 23, 2013, Valve unveiled a console operating system called SteamOS built atop the Linux operating system, a console input device called the Steam Controller, and the final concept of the Steam Machine hardware, which were tentatively scheduled to be released in 2014 but now will be released in late 2015. Unlike other consoles, the Steam Machine has no set hardware; its technology is implemented at the discretion of the manufacturer and is fully customizable in the same lieu as a personal computer. The Steam client enables users to purchase this hardware directly.

= = Market share and impact = =

Valve does not release any sales figures for its Steam service; it only provides the data to companies with games on Steam, which they cannot release without permission because of a non @-@ disclosure agreement with Valve. However, Stardock, the previous owner of competing platform Impulse, estimated that as of 2009, Steam had a 70 % share of the digital distribution market for video games. In early 2011, Forbes reported that Steam sales constituted 50 ? 70 % of the US \$ 4 billion market for downloaded PC games and that Steam offered game producers gross margins of 70 % of purchase price, compared with 30 % at retail. Steam 's success has led to some criticism because of its support of DRM and for being an effective monopoly. Free Software Foundation founder Richard Stallman commented on the issue following the announcement that Steam would come to Linux; he said that while he supposes that its release can boost GNU / Linux adoption leaving users better off than with Microsoft Windows, he stressed that he sees nothing wrong with commercial software but that the problem is that Steam is unethical for not being free software and that its inclusion in GNU / Linux distributions teaches the users that the point is not freedom and thus works against the software freedom that is his goal.

In November 2011, CD Projekt the developer of The Witcher 2: Assassins of Kings revealed that Steam was responsible for 200 @,@ 000 (80 %) of the 250 @,@ 000 online sales of the game. Steam was responsible for 58 @.@ 6 % of gross revenue for Defender 's Quest during its first three months of release across six digital distribution platforms? comprising four major digital game distributors and two methods of purchasing and downloading the game directly from the developer. Because Steam is nearly required to play most games for personal computers, its customer service has been highly criticized by its users, with users citing poor response times or lack of response in regards to issues such as being locked out of one 's library or having a non @-@ working game redemption key. In March 2015, Valve had been given a failing "F" grade from the Better Business Bureau due to a large number of complaints in Valve 's handling of Steam, leading Valve 's Erik Johnson to state that "we don 't feel like our customer service support is where it needs to be right now ". Johnson stated the company plans to better integrate customer support features into the Steam client and be more responsive to such issues. In December 2015, the French consumer group UFC Que Choisir initiated a lawsuit against Valve for several of their Steam policies that conflict or run afoul of French law.

= = = Sector competition = = =

From its inception in 2003 through to nearly 2009, Steam had a mostly uncontested hold over the PC digital distribution market before major competitors emerged with the largest competitors in the past being services like Games for Windows? Live and Impulse, both of which were shut down in 2013 and 2014, respectively. Sales via the Steam catalog are estimated to be between 50 and 75 percent of the total PC gaming market. Steam? scritics often refer to the service as a monopoly, and claim that placing such a percentage of the overall market can be detrimental to the industry as a whole and that sector competition can only yield positive results for the consumer. Several developers also noted that Steam 's influence on the PC gaming market is powerful and one that smaller developers cannot afford to ignore or work with, but believe that Valve 's corporate practices for the service make it a type of " benevolent dictator ", as Valve attempts to make the service as amenable to developers.

As Steam has grown in popularity many other competing services have been surfacing trying to emulate their success . The most notable major competitors are Electronic Arts ' (EA) Origin service , Ubisoft 's Uplay , Blizzard Entertainment 's Battle.net and GOG.com. Battle.net competes as a publisher exclusive platform , while GOG.com 's catalog includes many of the same titles as Steam but offers them in a DRM @-@ free platform . Upon launch of EA 's Origin in 2011 , several EA @-@ published titles were no longer available for sale , and users feared that future EA titles would be limited to Origin 's service . Newell expressed an interest in EA games returning to the Steam catalog though noted the situation was complicated . Newell stated , " We have to show EA it ? s a smart decision to have EA games on Steam , and we ? re going to try to show them that . "

Ubisoft still publishes their games on the Steam platform , however most games published since the launch of Uplay require this service to run after launching the game from Steam .	