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You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Create great-looking emails to match your company looks in the drag-and-drop template editor. Whether you need to include custom fields or non-issue fields, add some text to explain why a recipient is getting a notification, customize your email.To send email notifications, you can use three types of email templates: Single Issue Template, Table Template, or Comment Template. You create a custom one as well. To set up your email template, go to your project settings, and click on the NAFJC Templates tab, or configure one at the Global templates level.Templates can have 3 types of scopeNAFJC Native - These are Templates that we created and can not be edited by a user.Global - These are created by a Jira administrator and can be used in any project. They can not be edited by a project admin.Project - These are created by a Project administrator and can only be used in the project in which they were created. An administrator can convert a templates from the Project Scope to the Global scope from the menu in the Global templates page by clicking the Move to system template option. We provide 3 out-of-the-box Templates. Use the Single Issue Template theme for a Jira (Core, Software, or Service Management Agent) notifications. The Table Template theme helps you show a list of notifications in one email. With the Comment Template, you can display an issue and its comment in the email notification. Customize any of these themes in the template editor to create the notification email you need.Table Template. Use this type of default email template to notify recipients and provide the information on the long list of issues. An example of a customized Table Template email theme:Single Issue Template. This theme is applied to include a one-issue notification. The email based on the Single Issue Template theme provides the user with the relevant information from the issue. An example of a customized Issue Details email template:Comment Template. Send comment notifications that include the most relevant information in your email. Apply the Comment Template to your triggered notification. An example of a customized Comment Template email theme:You can find all these template themes in the NAFJC Templates tab. To use the necessary template theme, click on the three dots next to the template theme you need to use and Duplicate. Youll create a Copy of. template. Open it, edit and save.Block SectionTo expand these pre-defined templates, you can add the following blocks to customize your emails.Issue field. You can add the issue field block in pre-defined email templates or/and insert them into the text. In this case, the issue fields you inserted will be substituted with the related issue field's value. After you drop an issue field into the content-box, you should select it and go to the Settings to set up the Field Name.Non-issue field. This field isnt related to an issue but related to a notification. Use non-issue fields to add things like the recipients full name into an email message, email footer, or any other custom text block. Please do not add any non-issue fields to the issue block.Loop block. If you need to iterate the values of some fields, add them to the Loop block. We do not recommend using the Loop block with prepared email templates.Section blocks. Use the Section blocks to split up content on the sides of the screen. We currently support the following ratios:Image block. Add an image to the email template. We currently support only remote images hosted via HTTPS.Text. Add a text section to your email. Customize only a part of the text from the block section by selecting it and using the text editing menu, which appears next to your selected text.Text section. Add a text block, that includes a heading and simple text section.Divider. Add a divider to your email template. Apply styles to make it yours.Email footer. Customize your footer to let your recipients know the reason why they get their notifications. It's fully customizable and may include issue and non-issue field, text, link, or divider.Single issue. Include a block with issue details in your email template. No header or footer is included. Configure issue fields depending on your notification requirements.Issue table. Similar to a Single issue, Issue Table but makes it easier to read the list of Jira or JSD issues in one email for the recipient. Configure issue fields depending on your notification requirements.Link. Add a link as a separate element to your content box.StylesApply all the styles to a specific Class. The class applies to a block section. If you need to customize separate words in the text, click twice on the text to display the editing menu.Classes.Control which classes you apply to any of your blocks.Dimension.Set upsizes,margin, andpaddingfor your blocks.Typography.Customizefontfamily,size,weight,letter spacingin a Typography section. Apply colors to your text (provide a color number, or pick it from the color palette). Specify thealignmentof text in an element.Decoration.Set upbackground colorandborderfor your element, specifyborder-radius.SettingsElement Attribute ConfigurationIssue field. In the Setting section, you can choose a name for the selected issue field.Non-issue field. Select a Field Type for the non-issue field in settings. If you add a link to this element, you can also provide a page URL and Target page.Picture. Provide Alt text in the settings for the images in your email template.Text block. You can add Id and Title for the text block.Functional PanelOn the left side of the functional panel, you can get a preview of your email template for a desktop, tablet, or mobile. You can also view components to highlight the structure of your email template. It helps you to configure elements and makes it more convenient to apply styles to them.Export and Import buttons allow you to save the HTML code of a created email template or upload your personalized one. Please, note that you cant edit your code after you import it to the Template Editor.Undo or Redo your actions. Use the Clear button to remove all the elements or imported email templates from the Content Box.PlaceholdersWe support advanced configuration using placeholders. Please see the docs at Placeholders Hi@Cube,welcome to the Atlassian community!As a project admin, you can edit templates of your customer notification.Please take a look to the following how-to guide this helps,Fabio The only project management tool you need to plan and track work across every team.The best work management solution for all teams Atlassian is the only platform to be recognized as a Leader for both Marketing and DevOpsSpend less time trying to get aligned and more time driving projects forward with confidence.The context you need, when you need it. See software team release dates, real-time views of Figma designs, and more, all inside Jira.Explore features Configure Jira to match your teams processes, workflows, language, and more. Integrate with every tool you use to get work done.Learn more Track every teams work in a single timeline. Understand progress, map dependencies, and stay ahead of risks.With goals in Jira, its easy to track all the tasks across projects that contribute to a goal, no matter what team is working on it.If your team uses it, we integrate with it. Easily add your favorite tools from the Atlassian Marketplace, keeping Jira as your central source of truth.Before, our team saw Atlassian as individual tools...Now, [features & integrations] like Jira macros & Smart Links have really been pivotal in collaboration, productivity, & discoverability.Joe CotantSenior Technical Program Manager, RobloxJira offers a range of default templates that you can use for different interactions. Whether its adding some info to the header or footer, or shuffling around the contents of your emails, you can make a number of customizations and tailor the emails to your needs. Learn more about different types of notifications How email templates are set up in JiraJira generates emails in response to events using a templating engine called Apaches Velocity. This is a templating language that can pull apart Java objects in a number of ways.Read more about Velocity templates in the Jira developer documentation Viewing your email templatesTo view and customize Jira email templates:In the upper-right corner of the screen, select Administration > System.Under Mail, select Email templates.Download .zip: Download a ZIP archive with all available templates and edit them locally.Upload: Once youre done editing, upload the archive back to Jira. It needs to have the same .zipe file structure as the original archive. Check out the required file structureRevert to default: If there are problems with your uploaded templates, revert them to default ones. Jira will copy the default templates from its resources to your Jira shared home directory. Editing your email templatesEditing email templates allows you to change the look and feel of your email notifications. This comes in handy if youre looking to add your company branding or reorganize the content.When editing the template, youll be using the Velocity templating language, and some knowledge of it will be essential.Use these guides to learn about different email templates in Jira and their customization: Uploading the templatesYoull need to archive the templates into a ZIP archive and upload it back to Jira.Required file structureWhen editing the templates, you shouldnt change their filenames or location within the folder, as Jira will validate the file structure. You can add extra files to the archive, like graphics, and link them from your templates.Jira only checks if the required templates exist. The syntax or any errors in your templates won't be validated.The following file structure will be accepted. Alternatively, you can omit the templates folder: - templates - email - email-batch Applying the changesAfter uploading the templates, they wont be applied right away. Jira will first validate the file structure, and then ask you to apply the changes if everything looks right. Once you do it, the new templates will be moved to /data/templates, overwriting whatever exists there. Reverting templates to defaultIf something isn't right with your modified templates, you can bring the default ones by clickingRevert to default. Here's what happens when you do it:Jira copies the default templates from its resources to the Jira shared home directory.The default templates overwrite any existing templates in/data/templates.Jira clears the template cache so the default templates are applied right away. Good to knowHere is some other information that you might find useful.Templates: Default vs. currentCurrent templatesCurrent templates are templates that Jira is using for email notifications. They are stored in your Jira shared home directory and are updated every time you upload a new ZIP archive and apply the changes.Separate issue notifications and other events:/data/templates/emailBatched issue notifications:/data/templates/email-batchDefault templates Created with Sketch. Because of how default templates work, we recommend against modifying them so Jira always has something to revert or fall back to.Default templates are backup templates that are stored in the Jira resources, either in the installation directory (separate issue notifications and other events) or in one of the apps (batched issue notifications).These templates work as backups and will only be used in these cases:Missing files:One of the templates is missing in your Jira shared home directory. For this template, Jira will fall back to the default one.Revert to default: You chose to revert your templates to default. Default templates will be copied to your shared home directory, overwriting the current templates.Changes retained on upgradeSince email templates are stored in your Jira shared home directory, any changes you make will be retained on upgrade. Also, you dont have to restart Jira after editing the templates.Caching email templatesAll templates in the Jira shared home directory are cached. Thanks to that, Jira can use these templates even if the shared directory isnt accessible.We dont cache information about missing files if one of the templates is missing from the shared directory, Jira will try to read it every time and will fall back to the default template. How can financial brands set themselves apart through visual storytelling? Our experts explainhow.Learn MoreThe Motorsport Images Collections captures events from 1895 to todays most recentcoverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of EditorsPicks.Browse Editors' FavoritesHow can financial brands set themselves apart through visual storytelling? Our experts explainhow.Learn MoreThe Motorsport Images Collections captures events from 1895 to todays most recentcoverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of EditorsPicks.Browse Editors' FavoritesHow can financial brands set themselves apart through visual storytelling? Our experts explainhow.Learn MoreThe Motorsport Images Collections captures events from 1895 to todays most recentcoverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of EditorsPicks.Browse Editors' FavoritesGet started with Jira Service Management for adminsGet started with Jira Service Management for agents Configure a company-managed project as an administratorSet up service project users to work on requestsCategorize customer requests into request typesUse workflows in Jira Service MangementCustomize the field layout of your work item viewUse queues to triage requests for your agentsSet up an approval stageReceive requests from an email addressManage your customersGroup customers into organizationsCollect requests from anywhere with an embeddable widgetSet up your help centers and portalsCustomize your help centers and portalsSet up a knowledge base so customers can serve themselvesSet up notifications for your customers and teamReceive and manage requests in Slack or Microsoft TeamsSet up rules to automate repetitive tasksTry one of our common automation recipesDiscover new trends with service project reportsCreate service level agreements (SLAs) to manage goalsUse Jira Query Language to create service level agreementsCollect customer satisfaction on your team's performanceProvide help in multiple languagesIntegrate your service project with other products and appsGive your team access to additional featuresReply faster to your customers with canned responsesProtect your team's dataManage and administer team-managed service projectsDiscover IT service management (ITSM)Get started with IT service managementManage your request types and ITSM categoriesManage your service requestsManage your incidentsManage your problemsManage your changesManage your post-incident reviewsManage your servicesCreate or edit an ITSM reportManage your customers and organizationsManage your developer escalationsHelp customers as a service project agentBest practices for teams using Jira Service ManagementDiscover alerting and on-callUnlock your teams operationsUnderstand the integration frameworkIntegrate IT applications and toolsBuild on-call schedulesManage and respond to alertsReceive alert notificationsCreate automation rules to customize alertsManage users and rolesReports and logs in operationsSync with Jira issuesUse Jira Edge Connector (JEC) as an extensibility platformAutomation rule suggestions on work items and alertsThird-party integrations in Jira Service ManagementMove operations from Opsgenie to Jira Service ManagementLearn the Jira fundamentals powering Jira Service ManagementMoving to Jira Service Management CloudUse forms in Jira Service ManagementAtlassian Intelligence features in Jira Service ManagementAutomate customer support with the virtual service agentSearch for issues in JiraAllow customers to self serve with knowledge baseBuild journeys in Jira Service ManagementManage your work with viewsEmail templates provide an easy and efficient way to customize stakeholder notifications. They eliminate the need to draft new emails from scratch, especially when teams are responding to incidents, allowing for quick customization and notification. Templates ensure consistent messaging by structuring emails to include all necessary information. In Jira Service Management, you can use predefined placeholders and dynamic fields, which help minimize the likelihood of omitting critical details.Email templates are available only to Premium and Enterprise users of Jira Service Management. You need to be a org admin, site admin or Jira admin to create and manage email templates. Create email templatesTo create an email template: Go to Settings () > Products.Under Jira Service Management, select Incident management.Go to Email templates.SelectCreate template.Type in name, sender name and reply to address. Upload header image, if any, and type in the email body. You can also add dynamic fields in email templates. Dynamic fields automate the inclusion of up-to-date information in emails, ensuring consistency and reducing manual effort. Dynamic fields you can add to templates and what they mean are given below:Status: The status of the incident work itemImpact:The impact of the incident work itemIncident Created Time:The time at which the incident was created, shown as month day, year, hour:minutes AM/PM (in UTC).Affected Services: The names of services affected by the incident.Stakeholder Update Time: The time when stakeholder update was sent.Actor Full Name:The full name of the user sending the email.Stakeholder User Name:The full name of the stakeholder who is receiving the email.Select Create template. Email templates can be used by agents directly from work items to quickly notify stakeholders about the progress of the incident. Find out more about how agents can use email templates.If no customized email templates are created, agents can use the default email template. A preview of this template is available in the email templates list. Default templates have an empty email body and cannot be edited. Agents can type in a message when using them to notify stakeholders.Edit email templatesTo edit an email template: Go to Settings () > Products.Under Jira Service Management, select Incident management.Go to Email templates.Select More () next to the template you want to edit, and select Edit.Make the required changes, and select Save template. Delete email templatesTo delete an email template: Go to Settings () > Products.Under Jira Service Management, select Incident management.Go to Email templates.Select More () next to the template you want to delete, and select Delete.The Atlassian Community is here for you.Computer software installed on multiple computing platforms"Cross-platform" redirects here. For the railway station interchange, see cross-platform interchange. For the game term, see cross-platform play."Multi-platform" redirects here. For the mode of storytelling in television, see multi-platform television.Within computing, cross-platform software (also called multi-platform software, platform-agnostic software, or platform-independent software) is computer software that is designed to work in several computing platforms.[1] Some cross-platform software requires a separate build for each platform, but some can be directly run on any platform without special preparation, being written in an interpreted language or compiled to portable bytecode for which the interpreters or run-time packages are common or standard components of all supported platforms.[2]For example, a cross-platform application may run on Linux, macOS and Microsoft Windows. Cross-platform software may run on many platforms, or as few as two. Some frameworks for cross-platform development are Codename One, ArkUI-X, Kivy, Qt, GTK, Flutter, NativeScript, Xamarin, Apache Cordova, Ionic, and React Native.[3]Main article: Computing platformPlatform can refer to the type of processor (CPU) or other hardware on which an operating system (OS) or application runs, the type of OS, or a combination of the two.[4] An example of a common platform is Android which runs on the ARM architecture family. Other well-known platforms are Linux/Unix, macOS and Windows, these are all cross-platform.[4] Applications can be written to depend on the features of a particular platformeither the hardware, OS, or virtual machine (VM) it runs on. For example, the Java platform is a common VM platform which runs on many OSs and hardware types. A hardware platform can refer to an instruction set architecture. For example: ARM or the x86 architecture. These machines can run different operating systems.Smartphones and tablets generally run ARM architecture, these often run Android or iOS and other mobile operating systems.A software platform can be either an operating system (OS) or programming environment, though more commonly it is a combination of both. An exception is Java, which uses an OS-independent virtual machine (VM) to execute Java bytecode. Some software platforms are:Android (ARM64)ChromeOS (ARM32, ARM64, IA-32, x86-64)Common Language Infrastructure (CLI) by Microsoft, implemented in:The legacy .NET Framework that works only on Microsoft Windows.The newer .NET framework (simply called ".NET") that works across Microsoft Windows, macOS, and Linux.Other implementations such as Mono (formerly by Novell and Xamarin[5])HarmonyOS (ARM64, RISC-V, x86, x64, and LoongArch)iOS ((ARMv8-A))iPadOS (ARMv8-A)JavaLinux (Alpha, ARC, ARM, C-Sky, Hexagon, LoongArch, m68k, Microblaze, MIPS, Nios II, OpenRISC, PA-RISC, PowerPC, RISC-V, s390, SuperH, SPARC, x86, Xtensa)macOS x86, ARM (Apple silicon)Microsoft Windows (IA-32, x86-64, ARM, ARM64)PlayStation 4 (x86), PlayStation 3 (PowerPC) and PlayStation Vita (ARM)Solaris (SPARC, x86)SPARCUnix (many platforms since 1969)Web browsers mostly compatible with each other, running JavaScript web-appsXboxMinor, historicalAmigaOS (m68k), AmigaOS 4 (PowerPC), AROS (x86, PowerPC, m68k), MorphOS (PowerPC)Atari TOS, MiNTBSD (many platforms; see NetBSDnet,[clarification needed] for example)DOS-type systems on the x86: MS-DOS, PC DOS, DR-DOS, FreeDOSOS/2, eComStationBeOS (PowerPC, x86)Main article: Java (software platform)The Java language is typically compiled to run on a VM that is part of the Java platform. The Java virtual machine (Java VM, JVM) is a CPU implemented in software, which runs all Java code. This enables the same code to run on all systems that implement a JVM. Java software can be executed by a hardware-based Java processor. This is used mostly in embedded systems.Java code running in the JVM has access to OS-related services, like disk input/output (I/O) and network access, if the appropriate privileges are granted. The JVM makes the system calls on behalf of the Java application. This lets users to decide the appropriate protection level, depending on an access-control list (ACL). For example, disk and network access is usually enabled for desktop applications, but not for browser-based applets. The Java Native Interface (JNI) can also be used to access OS-specific functions, with a loss of portability.Currently, Java Standard Edition software can run on Microsoft Windows, macOS, several Unix-like OSs, and several real-time operating systems for embedded devices. For mobile applications, browser plugins are used for Windows and Mac based devices, and Android has built-in support for Java. There are also subsets of Java, such as Java Card or Java Platform, Micro Edition, designed for resource-constrained devices.For software to be considered cross-platform, it must function on more than one computer architecture or OS. Developing such software can be a time-consuming task because different OSs have different application programming interfaces (API).Software written for one OS may not automatically work on all architectures that OS supports. Just because software is written in a popular programming language such as C or C++, it does not mean it will run on all OSs that support that languageor even on different versions of the same OS.Web applications are typically described as cross-platform because, ideally, they are accessible from any web browser: the browser is the platform. Web applications generally employ a clientserver model, but vary widely in complexity and functionality. It can be hard to reconcile the desire for features with the need for compatibility.Basic web applications perform all or most processing from a stateless server, and pass the result to the client web browser. All user interaction with the application consists of simple exchanges of data requests and server responses. This type of application was the norm in the early phases of World Wide Web application development. Such applications follow a simple transaction model, identical to that of serving static web pages. Today, they are still relatively common, especially where cross-platform compatibility and simplicity are deemed more critical than advanced functionality.Prominent examples of advanced web applications include the Web interface to Gmail and Google Maps. Such applications routinely depend on additional features found only in the more recent versions of popular web browsers. These features include Ajax, JavaScript, Dynamic HTML, SVG, and other components of rich web applications.Because of the competing interests of compatibility and functionality, numerous design strategies have emerged.Many software systems use a layered architecture where platform-dependent code is restricted to the upper- and lowermost layers.Graceful degradation attempts to provide the same or similar functionality to all users and platforms, while diminishing that functionality to a least common denominator for more limited client browsers. For example, a user attempting to use a limited-feature browser to access Gmail may notice that Gmail switches to basic mode, with reduced functionality but still of use.Some software is maintained in distinct codebases for different (hardware and OS) platforms, with equivalent functionality. This requires more effort to maintain the code, but can be worthwhile where the amount of platform-specific code is high.This strategy relies on having one codebase that may be compiled to multiple platform-specific formats. One technique is conditional compilation. With this technique, code that is common to all platforms is not repeated. Blocks of code that are only relevant to certain platforms are made conditional, so that they are only interpreted or compiled when needed. Another technique is separation of functionality, which disables functionality not supported by browsers or OSs, while still delivering a complete application to the user. (See also: Separation of concerns.) This technique is used in web development where interpreted code (as in scripting languages) can query the platform it is running on to execute different blocks conditionally.[6]Third-party libraries attempt to simplify cross-platform capability by hiding the complexities of client differentiation behind a single, unified API, at the expense of vendor lock-in.Responsive web design (RWD) is a Web design approach aimed at crafting the visual layout of sites to provide an optimal viewing experienceeasy reading and navigation with a minimum of resizing, panning, and scrollingacross a wide range of devices, from mobile phones to desktop computer monitors. Little or no platform-specific code is used with this technique.Cross-platform applications need much more integration testing. Some web browsers prohibit installation of different versions on the same machine. There are several approaches used to target multiple platforms, but all of them result in software that requires substantial manual effort for testing and maintenance.[7] Techniques such as full virtualization are sometimes used as a workaround for this problem.Tools such as the Page Object Model allow cross-platform tests to be scripted so that one test case covers multiple versions of an app. If different versions have similar user interfaces, all can be tested with one test case.Web applications are becoming increasingly popular but many computer users still use traditional application software which does not rely on a client/web-server architecture. The distinction between traditional and web applications is not always clear. Features, installation methods and architectures for web and traditional applications overlap and blur the distinction. Nevertheless, this simplifying distinction is a common and useful generalization.Traditional application software has been distributed as binary files, especially executable files. Executables only support the platform they were built forwhich means that a single cross-platform executable could be very bloated with code that never executes on a particular platform. Instead, generally there is a selection of executables, each built for one platform.For software that is distributed as a binary executable, such as that written in C or C++, there must be a software build for each platform, using a toolset that translatestranscompilesa single codebase into multiple binary executables. For example, Firefox, an open-source web browser, is available on Windows, macOS (both PowerPC and x86 through what Apple Inc. calls a Universal binary), Linux, and BSD on multiple computer architectures. The four platforms (in this case, Windows, macOS, Linux, and BSD) are separate executable distributions, although they come largely from the same source code. In rare cases, executable code built for several platforms is combined into a single executable file called a fat binary.The use of different toolsets may not be enough to build a working executables for different platforms. In this case, programmers must port the source code to the new platform. For example, an application such as Firefox, which already runs on Windows on the x86 family, can be modified and re-built to run on Linux on the x86 (and potentially other architectures) as well. The multiple versions of the code may be stored as separate codebases, or merged into one codebase.An alternative to porting is cross-platform virtualization, where applications compiled for one platform can run on another without modification of the source code or binaries. As an example, Apple's Rosetta, which is built into Intel-based Macintosh computers, runs applications compiled for the previous generation of Macs that used PowerPC CPUs. Another example is IBM PowerVM Lx86, which allows Linux/x86 applications to run unmodified on the Linux/Power OS.Example of cross-platform binary software:The LibreOffice office suite is built for Microsoft Windows, macOS, Linux, FreeBSD, NetBSD, OpenBSD, Android, iOS, iPadOS, ChromeOS, web-based Collabora Online and many others.[8][9] Many of these are supported on several hardware platforms with processor architectures including IA-32, x86-64, ARM (ARMel, ARMhf, ARM64), MIPS, MIPSel, PowerPC, ppc64le, and S390x[9][10]A script can be considered to be cross-platform if its interpreter is available on multiple platforms and the script only uses the facilities built into the language. For example, a script written in Python for a Unix-like system will likely run with little or no modification on Windows, because Python also runs on Windows; indeed there are many implementations (e.g. IronPython for .NET Framework). The same goes for many of the open-source scripting languages.Unlike binary executable files, the same script can be used on all computers that have software to interpret the script. This is because the script is generally stored in plain text in a text file. There may be some trivial issues, such as the representation of a new line character.Some popular cross-platform scripting languages are:bash A Unix shell commonly run on Linux and other modern Unix-like systems, as well as on Windows via the Cygwin POSIX compatibility layer, Git for Windows, or the Windows Subsystem for Linux.Perl First released in 1987. Used for CGI programming, small system administration tasks, and more.PHP Mostly used for web applications.Python A language which focuses on rapid application development and ease of writing, instead of run-time efficiency.Ruby An object-oriented language which aims to be easy to read. Can also be used on the web through Ruby on Rails.Tcl A dynamic programming language, suitable for a wide range of uses, including web and desktop applications, networking, administration, testing and many more.Cross-platform or multi-platform is a term that can also apply to video games released on a range of video game consoles. Examples of cross-platform games include: Miner 2049er, Tomb Raider: Legend, FIFA series, NHL series and Minecraft.Each has been released across a variety of gaming platforms, such as the Wii, PlayStation 3, Xbox 360, personal computers, and mobile devices.Some platforms are harder to write for than others, requiring more time to develop the video game to the same standard. To offset this, a video game may be released on a few platforms first, then later on others. Typically, this happens when a new gaming system is released, because video game developers need to acquaint themselves with its hardware and software.Some games may not be cross-platform because of licensing agreements between developers and video game console manufacturers that limit development to one particular console. As an example, Disney could create a game with the intention of release on the latest Nintendo and Sony game consoles. Should Disney license the game with Sony first, it may be required to release the game solely on Sony's console for a short time or indefinitely.Main articles: Cross-platform play and List of video games that support cross-platform playSeveral developers have implemented ways to play games online while using different platforms. Psyonix, Epic Games, Microsoft, and Valve all possess technology that allows Xbox 360 and PlayStation 3 gamers to play with PC gamers, leaving the decision of which platform to use to consumers. The first game to allow this level of interactivity between PC and console games (Dreamcast with specially produced keyboard and mouse) was Quake 3.[11][12]Games that feature cross-platform online play include Rocket League, Final Fantasy XIV, Street Fighter V, Killer Instinct, Paragon and Fable Fortune, and Minecraft with its Better Together update on Windows 10, VR editions, Pocket Edition and Xbox One.Cross-platform programming is the practice of deliberately writing software to work on more than one platform.There are different ways to write a cross-platform application. One approach is to create multiple versions of the same software in different source treesin other words, the Microsoft Windows version of an application might have one set of source code files and the Macintosh version another, while a FOSS *nix system might have a third. While this is straightforward, compared to developing for only one platform it can cost much more to pay a larger team or release products more slowly. It can also result in more bugs to be tracked and fixed.Another approach is to use software that hides the differences between the platforms. This abstraction layer insulates the application from the platform. Such applications are platform agnostic. Applications that run on the JVM are built this way.Some applications mix various methods of cross-platform programming to create the final application. An example is the Firefox web browser, which uses abstraction to build some of the lower-level components, with separate source subtrees for implementing platform-specific features (like the GUI), and the implementation of more than one scripting language to ease software portability. Firefox implements XUL, CSS and JavaScript for extending the browser, in addition to classic Netscape-style browser plugins. Much of the browser itself is written in XUL, CSS, and JavaScript.There are many tools[13][14] available to help the process of cross-platform programming:8th: a development language which utilizes Juce as its GUI layer. It currently supports Android, iOS, Windows, macOS, Linux and Raspberry Pi.Anant Computing: A mobile application platform that works in all Indian languages, including their keyboards, and also supports AppWallet and native performance in all OSs.AppearIQ: a framework that supports the workflow of app development and deployment in an enterprise environment. Natively developed containers present hardware features of the mobile devices or tablets through an API to HTML5 code thus facilitating the development of mobile apps that run on different platforms.Boden: a UI framework written in C++.Cairo: a free software library used to provide a vector graphics-based, device-independent API. It is designed to provide primitives for 2-dimensional drawing across a number of different backends. Cairo is written in C and has bindings for many programming languages.Cocos2d: an open-source toolkit and game engine for developing 2D and simple 3D cross-platform games and applications.Codename One: an open-source Write Once Run Anywhere (WORA) framework for Java and Kotlin developers.Delphi: an IDE which uses a Pascal-based language for development. It supports Android, iOS, Windows, macOS, Linux.Ecere SDK: a GUI and 2D/3D graphics toolkit and IDE, written in eC and with support for additional languages such as C and Python. It supports Linux, FreeBSD, Windows, Android, macOS and the Web through Emscripten or Binaryen[Wikidata] (WebAssembly).Eclipse: an open-source development environment. Implemented in Java with a configurable architecture which supports many tools for software development. Add-ons are available for several languages, including Java and C++.FLTK: an open-source toolkit, but more lightweight because it restricts itself to the GUI.Flutter: A cross-platform UI framework for IOS, Android, Mac, Windows and developed by Google.fpGUI: An open-source widget toolkit that is completely implemented in Object Pascal. It currently supports Linux, Windows and a bit of Windows CE.GeneXus: A Windows rapid software development solution for cross-platform application creation and deployment based on knowledge representation and supporting C#, COBOL, Java including Android and BlackBerry smart devices, Objective-C for Apple mobile devices, RPG, Ruby, Visual Basic, and Visual FoxPro.GLBasic: A BASIC dialect and compiler that generates C++ code. It includes cross compilers for many platforms and supports numerous platform (Windows, Mac, Linux, Android, iOS and some exotic handhelds).Godot: an SDK which uses Godot Engine.GTK+: An open-source widget toolkit for Unix-like systems with X11 and Microsoft Windows.Haxe: An open-source language.Juce: An application framework written in C++, used to write native software on numerous systems (Microsoft Windows, POSIX, macOS), with no change to the code.Kivy: an open-source cross-platform UI framework written in Python. It supports Android, iOS, Linux, OS X, Windows and Raspberry Pi.LEADTOOLS: Cross-platform SDK libraries to integrate recognition, document, medical, imaging, and multimedia technologies into Windows, iOS, macOS, Android, Linux and web applications.[15]LiveCode: a commercial cross-platform rapid application development language inspired by HyperTalk.Lazarus: A programming environment for the FreePascal Compiler. It supports the creation of self-standing graphical and console applications and runs on Linux, MacOSX, iOS, Android, WinCE, Windows and WEB.Max/MSP: A visual programming language that encapsulates platform-independent code with a platform-specific runtime environment into applications for macOS and Windows A cross-platform Android runtime. It allows unmodified Android apps to run natively on iOS and macOSMendix: a cloud-based low-code application development platform.MonoCross: an open-source modelviewcontroller design pattern where the model and controller are cross-platform but the view is platform-specific.[16]Mono: An open-source cross-platform version of Microsoft .NET (a framework for applications and programming languages)MoSync: an open-source SDK for mobile platform app development in the C++ family.Mozilla application framework: an open-source platform for building macOS, Windows and Linux applications.OpenGL: a 3D graphics library.Pixel Game Maker MV: A proprietary 2D game development software for Windows for developing Windows and Nintendo Switch games.PureBasic: a proprietary language and IDE for building macOS, Windows and Linux applications.ReNative: The universal development SDK to build multi-platform projects with React Native. Includes latest iOS, tvOS, Android, Android TV, Web, Tizen TV, Tizen Watch, LG webOS, macOS/OSX, Windows, KaiOS, Firefox OS and Firefox TV platforms.Qt: an application framework and widget toolkit for Unix-like systems with X11, Microsoft Windows, macOS, and other systemsavailable under both proprietary and open-source licenses.Simple and Fast Multimedia Library: A multimedia C++ API that provides low and high level access to graphics, input, audio, etc.Simple DirectMedia Layer: an open-source multimedia library written in C that creates an abstraction over various platforms' graphics, sound, and input APIs. It runs on OSs including Linux, Windows and macOS and is aimed at games and multimedia applications.Smartface: a native app development tool to create mobile applications for Android and iOS, using WYSIWYG design editor with JavaScript code editor.Tcl/TkTitanium Mobile: open source cross-platform framework for Android and iOS development.U++: a C++ GUI framework for performance. It includes a set of libraries (GUI, SQL, etc..), and IDE. It supports Windows, macOS and Linux.Unity: Another cross-platform SDK which uses Unity Engine.Uno Platform: Windows, macOS, iOS, Android, WebAssembly and Linux using C#.Unreal: A cross-platform SDK which uses Unreal Engine.V-Play Engine: V-Play is a cross-platform development SDK based on the popular Qt framework. V-Play apps and games are created within Qt Creator.WaveMaker: A low-code development tool to create responsive web and hybrid mobile (Android & iOS) applications.WinDev: an Integrated Development Environment for Windows, Linux, .Net and Java, and web browers. Optimized for business and industrial applications.wxWidgets: an open-source widget toolkit that is also an application framework.[17] It runs on Unix-like systems with X11, Microsoft Windows and macOS.Xojo: a RAD IDE that uses an object-oriented programming language to compile desktop, web and iOS apps. Xojo supports natively compiling to Windows, macOS, iOS and Linux, and can also create compiled web apps that are able to be run as standalone servers or through CGI.This section possibly contains original research. Please improve it by verifying the claims made and adding inline citations. Statements consisting only of original research should be removed. (March 2025) (Learn how and when to remove this message)There are many challenges when developing cross-platform software:Testing cross-platform applications may be considerably more complicated, since different platforms can exhibit slightly different behaviors or subtle bugs. This problem has led some developers to deride cross-platform development as "write once, debug everywhere", a take on Sun Microsystems' "write once, run anywhere" marketing slogan.Developers are often restricted to using the lowest common denominator subset of features which are available on all platforms. This may hinder the application's performance or prohibit developers from using the most advanced features of each platform.Different platforms often have different user interface conventions, which cross-platform applications do not always accommodate. For example, applications developed for macOS and GNOME are supposed to place the most important button on the right-hand side of a window or dialog, whereas Microsoft Windows and KDE have the opposite convention. Though many of these differences are subtle, a cross-platform application which does not conform to these conventions may feel clunky or alien to the user. When working quickly, such opposing conventions may even result in data loss, such as in a dialog box confirming whether to save or discard changes.Scripting languages and VM bytecode must be translated into native executable code each time they are used, imposing a performance penalty. This penalty can be alleviated using techniques like just-in-time compilation; but some computational overhead may be unavoidable.Different platforms require the use of native package formats such as RPM and MSI. Multi-platform installers such as InstallAnywhere address this need.Cross-platform execution environments may suffer cross-platform security flaws, creating a fertile environment for cross-platform malware.[18]Operating contextList of widget toolkitsHardware virtualizationLanguage bindingSource-to-source compilerBinary-code compatibilityComparison of user features of messaging platforms^ "Design Guidelines: Glossary". java.sun.com. Archived from the original on 2012-02-13. Retrieved 2011-10-19.^ "SDD Technology blog: Definition of cross platform". SDD Technology. Retrieved 2020-10-18.^ Lee P Richardson (2016-02-16). "Xamarin vs Ionic: A Mobile, Cross Platform, Shootout".^ a b "Platform Definition". The Linux Information Project. Retrieved 2014-03-27.^ "About Mono". mono-project.com. Retrieved 2015-12-17.^ Corti, Sascha P. (October 2011). "Browser and Feature Detection". MSDN Magazine. Retrieved 28 January 2014.^ Choudhary, S.R. (2014). "Cross-platform testing and maintenance of web and mobile applications". Companion Proceedings of the 36th International Conference on Software Engineering. pp.642645. doi:10.1145/2591062.2591097. hdl:1853/53588. ISBN9781450327688. S2CID1903037.^ Mehrotra, Pranob (2020-12-01). "Collabora Office suite gets a new layout for Android tablets and Chromebooks". XDA-Developers. Retrieved 2021-01-15. Collabora Office is a popular open-source alternative to the Microsoft Office suite. It's based on LibreOffice, and it's available on a variety of platforms, including Windows, Linux, iOS, and Android. This year in July, a major update for the office suite brought support for Chrome OS devices.^ "Collabora Office on iOS and Android Just got Better!". Adfinis. 2020-12-15. Retrieved 2021-01-15. ...touch optimized interfaces: one for tablets and one for phone screens. ...(iOS, iPadOS, Chromebooks, Android).^ "Nextcloud Ubuntu Appliance adds Collabora Online to Raspberry Pi image". MuyLinux. 2021-03-26. Retrieved 2021-03-30. the first viable self-hosted web office solution for the popular Raspberry Pi 4 platform^ Cribba. Quake III Arena, Giant Bombcast, February 15, 2013.^ A Closer Look At The Dreamcast Internet Starter Kit^ The GUI Toolkit, Framework Page^ "Platform Independent FAQ". Archived from the original on 2008-08-16. Retrieved 2009-04-25.^ "Cross-Platform SDK Libraries for Recognition, Document, Medical, Imaging, and Multimedia". www.leadtools.com. Retrieved 2021-03-03.^ "12 benefits of Xamarin Cross-platform app development". HeadWorks. 15 Mar 2019.^ WxWidgets Description^ Warren, Tom (2020-01-14). "Microsoft bids farewell to Windows 7 and the millions of PCs that still run it". The Verge. Retrieved 2020-02-06.Retrieved from " Hi@sta Hrnn _RdN_In the JSM project in the customer notification section in the project settings, edit the main template for notifications.Edit the CSS section to use other lettertype and color.

Jira service management change template. Jira service management email requests. Change management email examples. Jira service management edit email template. Jira service management email. Jira service management change email. Jira change email notifications.