libertyOS

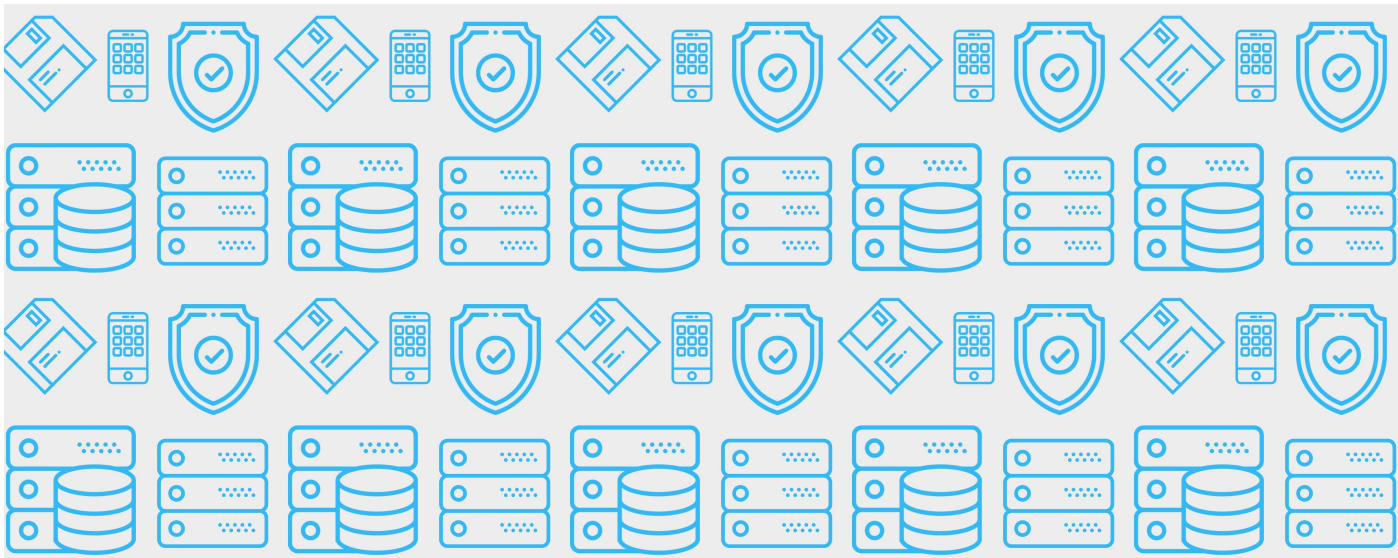# LibertyOS Whitepaper

libertyOS

Liberty Blockchain Technologies UG

(haftungsbeschränkt)

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ABSTRACT

Liberty OS is a lightweight, decentralized, crypto/security-oriented Operating System focused on accessibility, user privacy and ease of use. It features an easily usable installer which takes care of nearly everything during the installation; therefore, even people who lack the know-how are able to successfully install it.

Liberty OS comes with most common crypto-wallets pre-installed and/or selectable to be installed during the installation process. Now that core development of Liberty OS is completed, Liberty Blockchain Technologies UG aims to receive further funding to add additional developers and other team members, especially consultants and marketing experts, and continuously expand Liberty OS's capabilities and prevalence.

Liberty Token is a Cryptocurrency Token that is used on the Liberty OS as a means to provide cash income to users who choose to view advertisements on Liberty OS. In addition to incentivizing users to view advertisements, the Liberty Token allows advertisers to place ads and also facilitates a stable income for application and open-source developers. Liberty Blockchain Technologies UG facilitates the sale of space and utility for non-intrusive, screened and safe advertisements.

1. TOKEN

The Liberty Token is a Cryptocurrency Token on the Binance Blockchain or the Ethereum Blockhain.

Liberty OS uses the decentralized Liberty Token (LIB) on many occasions throughout the Liberty Operating System (detailed further below). The whole token was built with ease-of-use in mind and therefore, most factors regarding its usage were made very simple via the incorporation of the Liberty Wallet into the OS.
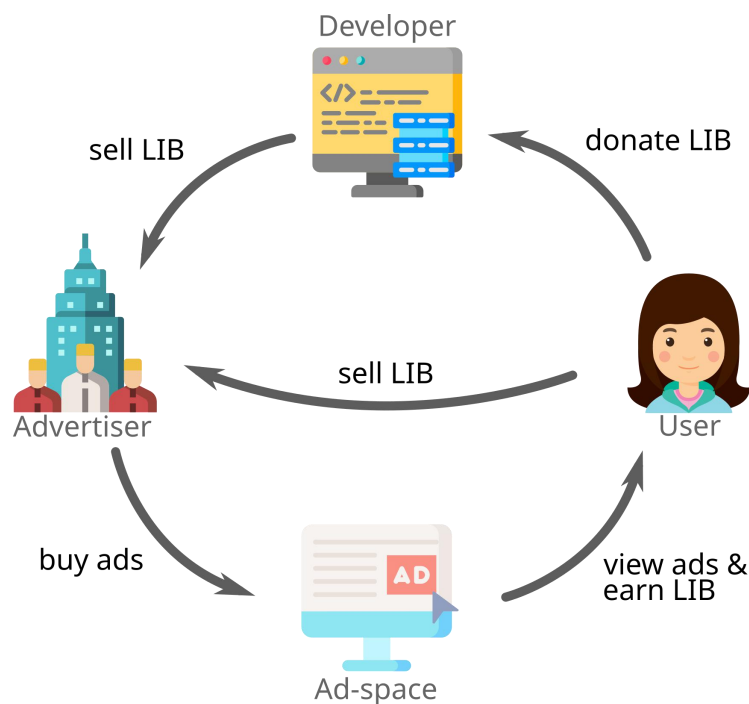

Image 1: Liberty (LIB) Token Economics

1.1. Token Features

Liberty Token's uses include but aren't limited to:

1) Advertising

Advertisers are able to buy ads in the start menu, other locations on the Operating System (similar to Windows 10) or in the specially developed web browser "Liberator". Thereafter, users receive Liberty Tokens for every ad they view. The users of Liberty OS receive Liberty Tokens for viewing and interacting with ads as they choose. This means that Liberty OS cuts out the middlemen of advertising, because the revenue generated by ads is directly distributed to the users of Liberty OS.

With this concept, ads become something more than just the annoying flashy hinderance they used to be – they become a source of income for users of Liberty OS. Liberty Blockchain Technologies UG (haftungsbeschränkt) sells ad space and utility to safe, screened and ideal ad providers to generate revenue.

2) App Store

Liberty OS also features an app store on which its users are able to easily buy and install applications to further enhance their experiences. In addition, users of Liberty OS are also able to easily donate to

freeware and/or open source application developers using Liberty Tokens.

The submission and processing of apps to the Liberty App Store is very simple and straightforward compared to other app stores such as the Google Play Store, the Apple App Store and the Windows Store. Everyone is able to submit secure apps without the need for a registration or any kind of developer membership payment (as is common with most current app stores).

After the submission of the app, only a small wait time is required before the app gets approved and becomes visible to other users – this short acceptance and propagation timeframe is required in order to ensure the quality and security of the submitted app.

This app system incentivizes the creation of high-quality freeware and open-source projects. At the moment, many open-source projects struggle to receive enough donations to keep their projects alive. With Liberty OS, it becomes very easy for developers to get paid in LIB and Liberty OS users will constantly receive new LIB, which they can donate to their favorite projects.

1. LIBERTY CRYPTOTRACKER

The Liberty CryptoTracker application is an application available for LibertyOS, Linux, Windows, and MacOS. With the CryptoTracker application, you can track the prices of different cryptocurrencies including Bitcoin (BTC), Ethereum (ETH), Tron (TRX), Litecoin (LTC) and many more.

The CryptoTracker application shows you the current prices of different cryptocurrencies. Moreover, the CryptoTracker application shows you the available exchanges and traded volume. To have access to the application, you have to be a subscriber to the CryptoTracker application. The monthly fee for the CryptoTracker application is 50 LIB per day. If you decide, after the ICO will be finished, that after the ICO you do not want to claim your LIB and instead you want to get access to the CryptoTracker application, you can instead claim a subscription to the CryptoTracker application. This means that if you have a claim for 8000 LIB you can – instead of claiming the LIB – get access to the CryptoTracker application for 40 day.

2. LIBERTY CRYPTOTRACKER

The Liberty CryptoTracker application is an application available for LibertyOS, Linux, Windows, and MacOS. With the CryptoTracker application, you can track the prices of different cryptocurrencies including Bitcoin (BTC), Ethereum (ETH), Tron (TRX), Litecoin (LTC) and many more.

The CryptoTracker application shows you the current prices of different cryptocurrencies. Moreover, the CryptoTracker application shows you the available exchanges and traded volume. To have access to the application, you have to be a subscriber to the CryptoTracker application. The monthly fee for the CryptoTracker application is 50 LIB per day.

3. INSTALLATION

Liberty OS includes a graphical installer, which boots right into a live, optimized desktop environment. During the installation process, the user is able to choose from a wide variety of programs to be installed with the Operating System (including: Electrum, Electrum LTC, Mist Ethereum Wallet, Neon Wallet, Firefox, Chrome, Office, …).

A network connection is recommended for the installation and is used to automatically update the Liberty OS system and installer before installing the Operating System. This is performed in order to ensure a perfectly up to date, optimized and secure installation.

Liberty OS can be installed on nearly any modern hardware. Liberty OS does not need many hardware resources compared to other operating systems such as Windows and Mac OS.

4. OPERATING SYSTEM

The Liberty operating system consists of many parts, which are explained in further detail below.

Image 2: Liberty OS Desktop

4.1. TASK BAR

The Task Bar is located on the upper border of the Desktop. The bar hosts many features including, but not limited to, the Start Menu on the left side and system properties and features, including WLAN, Power Management (Laptops only), the current time and other features, on the right side.

4.2. PLANK

Along the bottom side of the Desktop is an additional bar called the Plank. It's mainly used to quickly access commonly used applications and offers a general overview of the Desktop.

It automatically hides itself when an application comes too close or is used in full screen mode. However, the Plank will reappear as soon as the mouse cursor moves into its area.
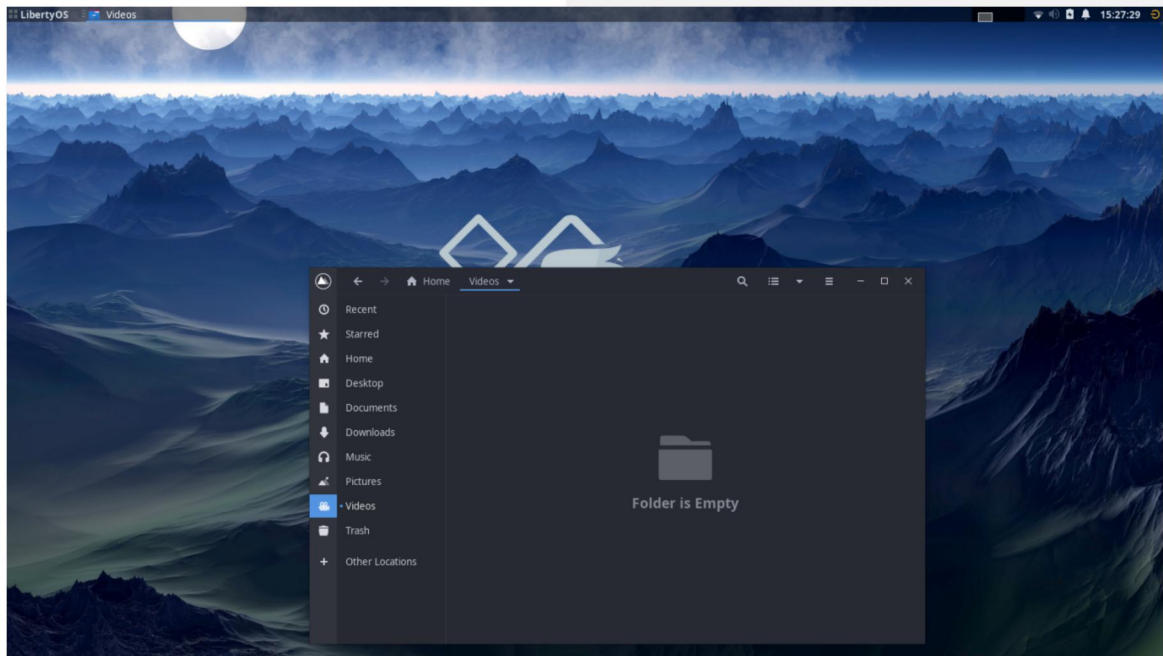
Image 3: File Explorer

4.3. START MENU

Embedded in the leftmost corner of the Task Bar is the Start Menu, which can be expanded and accessed by clicking on the "LibertyOS" button.

Image 4: Liberty OS Start Menu

Image 4: Liberty OS Start Menu

The Start Menu displays all installed applications in an organized manner by categorizing them into groups such as Graphics, Internet, Multimedia, Crypto currency, Office and many more.

4.4. Search

Furthermore, on the upper right corner of the Start Menu is a search field, which can be used to quickly search for installed applications.

4.5. Current User

On the bottom left corner of the Start Menu, the name of the currently logged in user appears.

4.6. SHUT DOWN MENU

By clicking on the Shut Down button on the far-right corner of the Task Bar, users can open the Shut Down Menu, which displays further system actions such as log out, restart, shut down, suspend and switch users.
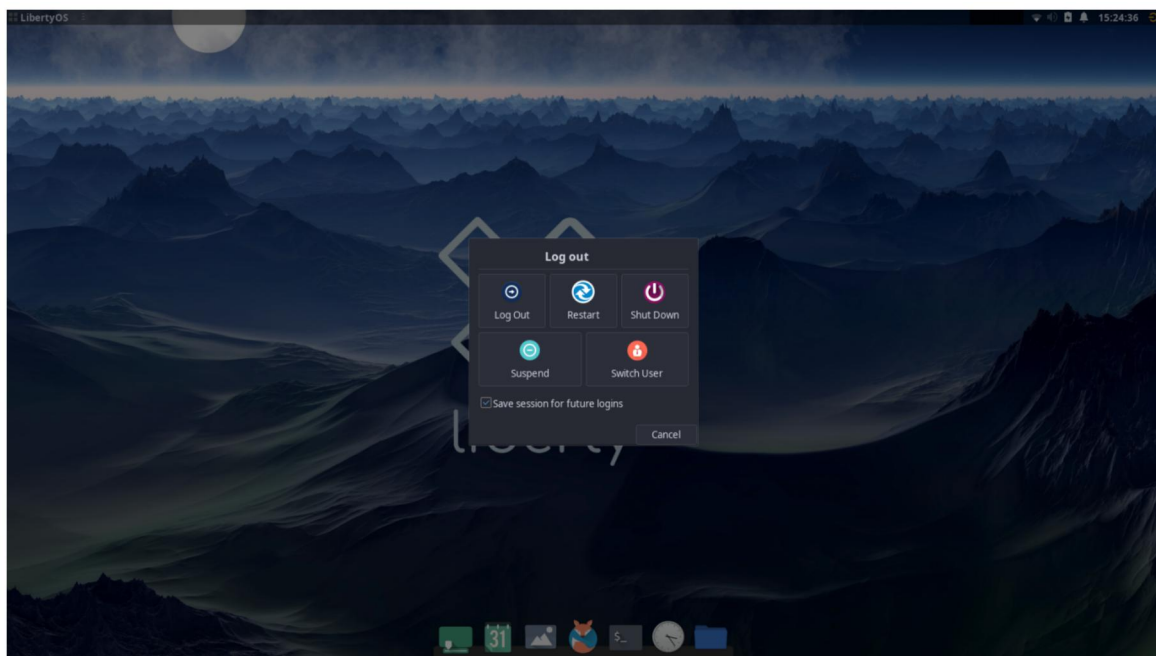
4.7. SETTINGS MENU

The Settings Menu can be opened by clicking on the settings icon right below the Start Menu button, on the top left of the Start Menu.

Nearly every aspect of Liberty OS can be modified from within the Settings Menu. This includes the background, all bars, colors, energy management and many more aspects (as can be seen below).
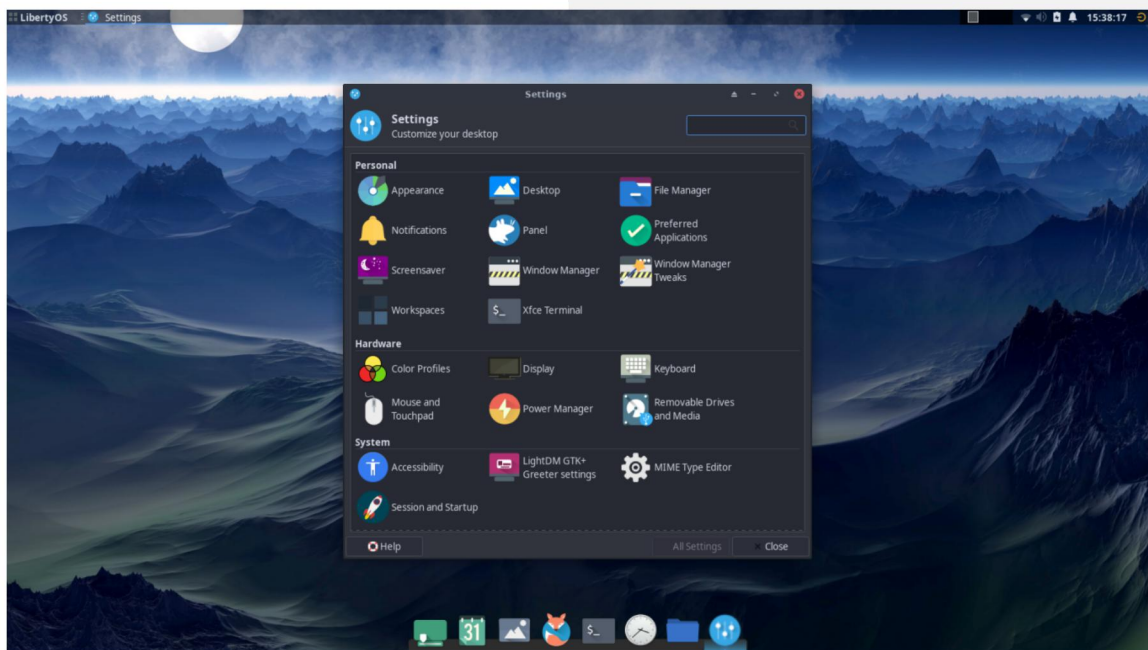

Image 6: Settings Menu

On the bottom portion of the Settings Menu, users can select to save the current state of the Operating System in order resume from where they left off after a restart of the system.

5. COMPARISONS WITH OTHER OPERATING SYSTEMS

In the area of desktop and laptop computers, Microsoft Windows dominates global markets at 78% globally. In second place, Apple's Mac OS makes up 14% of the global markets. Liberty OS is built to compete with these most commonly used Operating Systems and has many advantages over Windows and Mac OS. In this section, those advantages are explained in detail.

5.1. WINDOWS

Windows 10 is produced by Microsoft, is part of its Windows NT operating systems family, and is the successor to Windows 8.1. Released on July 15, 2015, Windows 10 is currently the most used desktop and laptop Operating System in the world, with over 800m users. Its biggest rival, Mac OS, lags far behind in terms of market share with around 100m users.

But Windows being the most popular operating system doesn't necessarily mean that it's also the best – in fact, Window's dominant market position makes it a weaker operating system in many other aspects such as security and vulnerability to viruses and malware. We will take a closer look at what makes Liberty OS better than Windows.

5.1.1. Cost

Liberty OS can be downloaded for free and installed on any number of machines. On the other hand, Windows 10 is licensed by Microsoft, and therefore one needs to buy an expensive new license for every device. Windows 10 is offered using a number of methods, including a suite of licenses such as Retail, Enterprise and OEM licenses. Windows 10 is available to be bought as retail software directly from Microsoft online, physical stores and additional partners. Using the US market as an example, all Windows 10 retail editions are priced above $100 USD, allowing Microsoft to make solid returns on retail licenses (Windows 10 Home is $139 USD, Windows 10 Pro is $200 USD, Windows 10 Pro for Workstations is $309 USD – note that each license is only active for 1 single PC).

A majority of license revenue earned by Microsoft is made through the selling of Windows 10 bulk licenses to Enterprises – primarily to corporate networks with thousands of computers, workstations and servers. These contracts are not public and are negotiated directly with Microsoft (via Microsoft Enterprise Agreements) – these enterprise license costs also greatly increase the cost of ownership for Windows 10 devices.

From a consumer perspective, Windows 10 licenses are not only sold in retail and online stores for hundreds of dollars but are also available as Original Equipment Manufacturer (OEM) licenses for new desktops, laptops and other devices from online and physical stores. Most new computers in the Microsoft ecosystem come with Windows 10 preinstalled at a seemingly "free" price. You might think preinstalled Windows 10 OEM licenses as free, but manufacturers, such as Dell, HP, Lenovo, actually pay considerable amounts to Microsoft in bulk for these OEM licenses, which are then preinstalled on new consumer targeted computers. These OEM Windows 10 license costs are then passed on to consumers via increased computer prices (specific prices vary by OEM company, but license prices can vary from $28 USD to over $50 USD per computer). Every time you buy a new computer with Windows 10 preinstalled, you are also buying a new Windows 10 license even if you already had licenses on previous computers.

These significant enterprise and consumer costs for Windows 10 are a sharp contrast to completely free operating systems such as Liberty OS. Liberty OS will always be free to download and install, for all computers, devices and to both consumers and enterprises. There are no strings attached for this completely free, lightweight, security and privacy-oriented Liberty OS. There will be no complex licensing model or any upscale pricing strategy – Liberty OS is simply free under all circumstances.

5.1.2. Performance

Liberty OS is much more lightweight, quicker, faster and smoother even on older, outdated hardware. Windows 10 is slower compared to Liberty OS because Windows 10 is running large amounts of processes, services, checks and unneeded software in the background. Windows 10 therefore has a stricter minimum hardware requirement and requires more expensive, mid-end hardware to even run normally.

Liberty OS, even with all the shiny effects and features of modern desktop environments, runs significantly faster than Windows 10. As users become less reliant on powerful, all-encompassing desktop environments and more reliant on the web, users gradually will not need to use processor and memory intensive operating systems like Windows 10, and can instead get by using faster, more light-weight and secure operating systems like Liberty OS.

Using the same hardware specifications, Windows 10 is, generally speaking, significantly slower than Liberty OS. Liberty OS is much more efficient in thread scheduling and is three generations ahead of Windows 10 in thread scheduling algorithms and processes. Windows 10 is also inferior in terms of memory management and allocation and is more seriously hampered by heavy workloads caused by the numerous Microsoft system background processes and unoptimized third party processes. Sometimes, and more frequently on older hardware, Windows 10 and third-party processes can take up to 95% of CPU usage and even run hard drives at near full capacity non-stop due to continuous, heavy file I/O caused by certain system processes,

causing further system hardware degradations. This performance issue is made worse if the processes auto-run on system startup, which is frequently the case.

Compounding the Windows 10 operating system performance issue is the significant amount of software that is poorly optimized, such as certain anti-virus software. Conflicts and lack of optimization for Windows 10 processes and software sometimes require manual process terminations or even system reboots before performance is restored, albeit temporarily. Windows 10 is prone to having too many programs running in the background on startup, consuming excessive amounts of resources. Scheduled processes such as antivirus scans, utility full system scans and even Microsoft's own periodic Windows Update installations can slow Windows 10 systems to a crawl.

Windows 10 systems also tend to perform gradually worse over time, as mandatory, periodic Windows updates make your computer hungrier for resources, RAM and CPU usage. Gradually, more programs are installed (accidentally or not), more processes run in the background simultaneously and more temporary, hidden files are generated by normal, daily usage. As you run programs on Windows 10, oftentimes temporary, hidden files are stored on your computer's hard drive, and through file accumulation over time, computer performance will become worse over the years.

Windows operating systems are traditionally very heavy on system resource requirements and usage. When using Windows, you might eventually find that your system does not have enough RAM (one of

the biggest reasons for computers running slower than expected). Over time, updates to Windows 10 and other Windows software will make your system hungrier for additional resources. Low RAM almost always guarantees poor system performance and creates stability issues – Windows 10 is particularly heavy on RAM usage due to the hungry nature of most first-party and third-party software and processes – this raises hardware costs and worsens performance issues as well. As new features and mandatory revamps are executed for Windows 10, Internet Explorer, Google Chrome, Mozilla Firefox and other software/processes, the Windows 10 system will gradually perform worse and freeze, crash more often until an expensive hardware upgrade is required for the user.

Liberty OS is designed and engineered, using modern design principles and methodologies, from the ground up to have high performance, stability and dependency. It is not reliant on hardware resources (such as RAM and CPU) and is much more platform-independent than Windows 10. Although Liberty OS is built with a small footprint and ease-of-use in mind, it also easily supports changes and upgrades of components, modifications without causing issues or conflicts with existing components. Liberty OS also has no forced revamp cycles or feature additions – all upgrades are optional, and the customer can choose if, and when, these software and operating system updates, occur. In general, Liberty OS performs far more efficiently and smoothly than Windows 10 systems of the same hardware capability and will not degrade in performance over time. The smoother, faster performance and user experience provided by Liberty OS over

Windows 10 is observable over the entire spectrum of PC hardware and is most pronounced on older hardware that Windows 10 may have rendered obsolete over time.

5.1.3. Reliability

Liberty OS is more reliable and stable than Windows 10 due to Window 10's size, complexities and numerous processes involved – even with more recent updates. As a Windows user, you have likely experienced many situations during which your active programs become unresponsive, hang, and even crash without warning. You have likely used Window's Task Manager to intervene and force exit offending software, sometimes even with no response from the operating system after multiple close attempts.

With Liberty OS, software and process failures are far rarer and far apart. In addition, each application is completely self-contained – an application's rare failure will not impact the operating system or any other application or software. Misbehaving applications can be easily and swiftly terminated via user interface or command line.

5.1.4. Bloatware

When you buy a new computer, it often comes preinstalled with a large number of bloatware, which are unnecessary, built in software, games and applications that degrade system performance and use up valuable computer resources and storage space. Bloatware essentially act as forced, installed advertisements meant to hook new customers

to new products and games created by Microsoft partner companies. Forced bloatware on Windows 10 take control away from paying customers and provide a highly negative user experience in terms of operating system performance degradation, user annoyances and loss of productivity.

A few years back, Microsoft offered their Signature Edition PCs, which were some of Microsoft Store's best products because they used clean versions of Windows 10 and omitted all bloatware on these PCs. Unfortunately, these Signature Edition PCs have since been abandoned as Microsoft doubled down on its strategy of expanding bloatware prevalence in the Windows market as an additional means of increasing corporate revenue. For example, Microsoft earns money from developers to force games, such as Candy Crush Saga, into the Windows 10 Start Menu of paying customers.

Although Microsoft improved Windows 10 in terms of removing bloatware when compared with previous Windows operating systems such as Windows 8, 7, Vista and XP, uninstalling bloatware still takes extra initiative, technological understanding and can be done only one at a time. Complete bloatware removals take a significant amount of time, require a certain level of user expertise and can be prone to user mistakes, such as having a user mistaking critical drivers as bloatware and accidentally uninstalling said drivers. If such bloatware uninstallation mistakes are made, it's very difficult to find and reinstall the correct driver versions and builds again – in this scenario, the user is better off just factory resetting the entire computer.
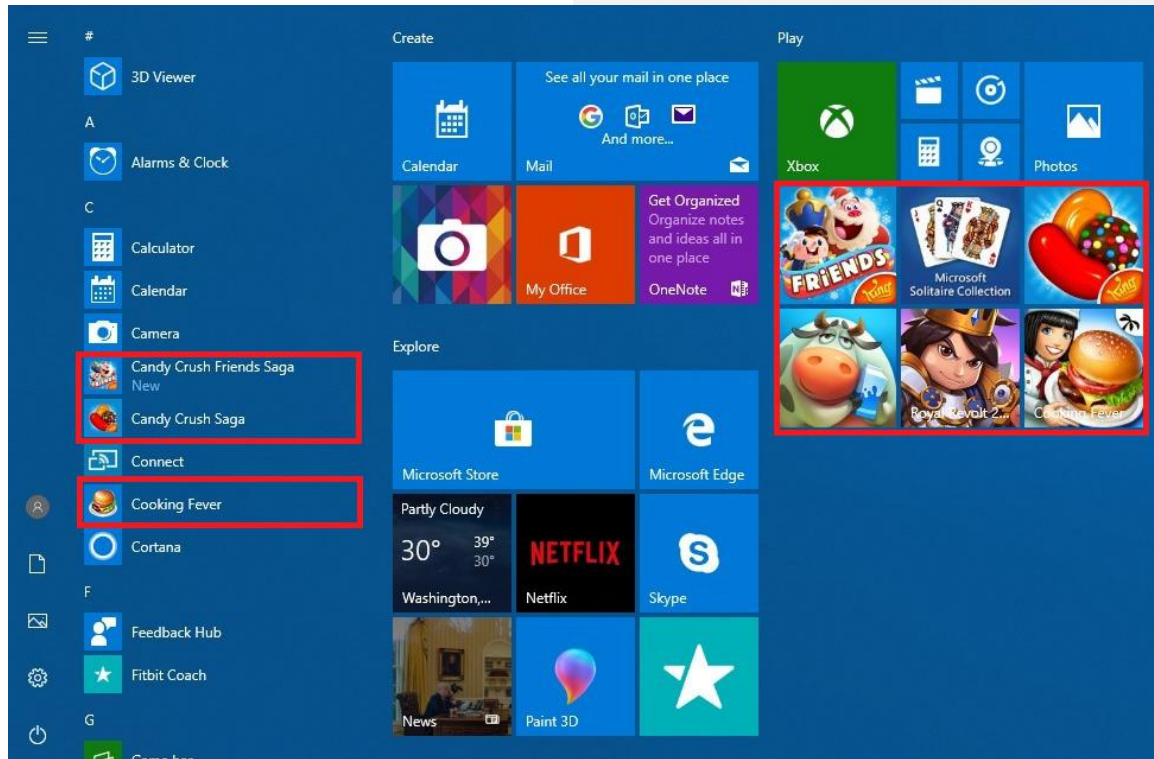
Image 7: Windows 10 Start Menu Bloatware

For Liberty OS, we take a strong stance against bloatware and junk applications of all forms. We feel that the best approach towards bloatware is to firmly reject and block all bloatware from our operating system and to develop all builds of Liberty OS to be completely clean from junk, pre-installed software. This approach gives control back to our users, enables the best possible user experience and system performance out of the box.

5.1.5. Advertisements

Although Windows 10 is a high cost, licensed product, Microsoft has taken control from paying customers and has riddled the entire Windows 10 operating system and ecosystem with unavoidable advertisements. All forced, targeted advertisements, such as lock screen ads, taskbar ads, file explorer ads, action center ads and Start Menu ads, are pushed by Microsoft to generate increased revenue. Users have no control over if and when they see these intrusive advertisements.

In addition to forcing Windows 10 operating system ads, Microsoft also initially ties new Windows 10 installs to using the Bing search engine. Tie-ins to Bing web searches for Windows 10 allows Microsoft to show further target advertisements and continuously gather further user data based on searches and interactions customers make.
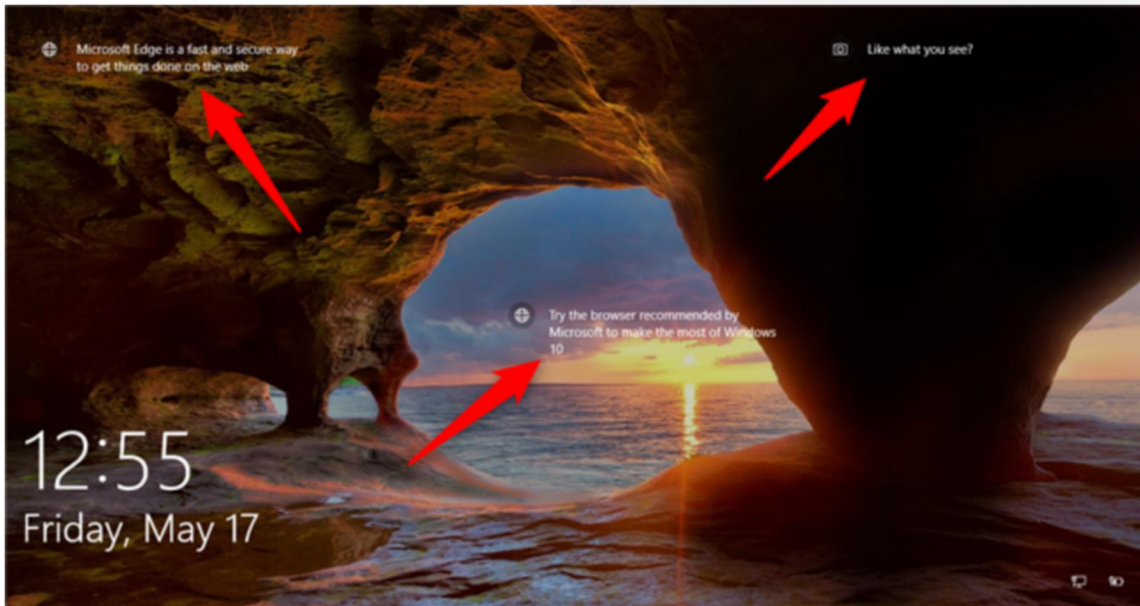
Image 8: Windows 10 Login Screen Advertisements

Liberty OS has a completely opposite approach towards advertisements – Liberty OS focuses on customer wellbeing, data safety, security, privacy and giving customers full control. Not only does Liberty OS not collect any data for any reason such as customer targeted advertisements, the operating system gives users the ability to easily disable all ads.

Most importantly, Liberty Technologies flipped the advertisement equation around 180 degrees by giving users the ability to even earn extra cash and obtain LIB by choosing to view ads. Users are empowered and now have full control over if, when, where they want

to view ads. Users can thus generate a side income via earned distributed, secure cryptocurrency by choosing to view and interact with ads from 3rd party companies as they see fit. Even if the user does not want to generate the extra income using ads, he or she can simply turn off ads with a single setting change, and use Liberty OS as an ad-free, highly secure and private operating system.

5.1.6. Install Size

Liberty OS is a very small and lightweight operating system when compared to Windows 10. From a clean install perspective, Windows 10 and Liberty OS have roughly similar ISO install sizes (just under 4 GB). However, the downloading, updating, installation and setup processes take far longer for Windows 10 than those of Liberty OS. It takes a fresh Windows 10 machine multiple hours just to update from scratch due to the sheer amounts and sizes of the required updates.

A complete Windows 10 installation ultimately ranges from 25 GB to 40 GB depending on the version and flavor of Windows 10 installed, versus just 15 GB to 20 GB for Liberty OS, making Liberty OS the far more lightweight option. Windows 10 installs are also more susceptible to hitting download limits by Broadband providers and slow download speeds due to its more extensive, more hardware intensive and lengthy install and patching processes.

5.1.7. Virus and Malware Susceptibility

Although no operating system is truly, completely risk free, Windows 10's heavy dominance of the personal computer market makes Windows a very big target for developers of viruses, malware, worms and scams. Numerous viruses have even caused widespread, worldwide damage for Windows users. Windows 10 users are at greater risk of having their systems be infected by worms, viruses and malicious code/attacks, and are generally recommended to install active anti-virus applications and even firewall software. However, installing these security software drain significant system resources such as system memory and CPU usage. High system resource usage is even more pronounced during system scans and the constant streams of updates required for these security software. Installing these, oftentimes pricy, software do not completely eliminate the risk of getting infected or being targeted by scams, because developers of viruses and malware constantly work to bypass existing firewalls and anti-virus software in an ongoing security arms race worldwide, negatively impacting millions of Windows users.

Liberty OS is highly secure and safe. Users generally do not need to install any third-party security software, which saves users money and removes hassles as well as security worries while improving system performance. Liberty OS provides greater security and safety from viruses, malware, worms and other widespread, malicious code/attacks – Windows 10, on the other hand, is less secure and is impacted by targeted viruses, hackers and malware more quickly and readily, even with third party security products installed.

Two additional reasons for Windows 10's security weaknesses are its lower difficulties of executing social engineering attacks, and its quantity of suboptimal software. Social engineering is the act of tricking a victim to do something they should not do or to reveal a secret, such as opening email attachments containing worms, malware or viruses. Suboptimal software also make social engineering a more significant hazard for Windows users, and combined, these two factors can escalate singular virus concerns into widespread, global incidents.

In Windows 10, a file can be an executable (like "exe" or "scr") which means that it can be run like programs to make beneficial or malicious system changes, or not (like "txt") which means that it cannot be run. In Windows 10, and legacy Windows operating systems, it's far too easy to accidentally run an executable and fall victim to viruses. Although it's common sense for more tech savvy consumers to not run unknown executables, casual users, or non-vigilant users, are frequently social engineered to click on malicious executables which claim to be legitimate documents or photos. Once these malicious files are clicked, computers are rapidly taken over by viruses. Removing these viruses while reverting all the resulting negative consequences from a computer is incredibly difficult and sometimes even impossible, if viruses corrupt or destroy files and system drives.

Although social engineering is also possible in Liberty OS, it is incredibly more difficult to accomplish and requires far more steps and effort for attackers to target Liberty OS users. Whereas Windows 10 makes malicious executables much easier to run, Liberty OS requires, in this email attachment example, users to (i) read the email, (ii) save

the attachment, (iii) give the attachment full executable permissions, (iv) elevate user to root user, and (v) actually run the attachment. In addition, Liberty OS provides a strong differentiation between normal users and root users, which means that for most of a user's time on a Liberty OS computer, malicious programs cannot execute at all due to the lack of elevated permissions granted by root access, preventing any damage from being done. Unfortunately, Windows 10 blurs the line between root and normal users, allowing users to frequently run as privileged root users and allowing viruses to cause widespread damage. Safety and security protocols on Liberty OS safeguard all users from malicious files and makes attackers' jobs incredibly harder, which makes Liberty OS safer than Windows 10.

Windows 10 also includes numerous buggy or legacy software (and even packages, dynamic-link libraries/DLLs worsen vulnerabilities) that hackers and malicious programs can take advantage of. Even Microsoft's heavily used email clients are constantly vulnerable to attacks (observable on Microsoft Security Bulletins), which lead to heavy damages, continuous, forced system updates and reboots. Liberty OS does not have any of these weaknesses thanks to its design, security focus, architecture and software packaging system.

One final security weakness of Windows 10 is Microsoft's cultivated software "monoculture", which presents a global security threat. Microsoft's software are so extensive, dominant and widely used on Windows that a single malicious program, which exploits a single flaw in the operating system, can cause widespread damage. Examples of this monoculture threat include worldwide impact, incidents caused by

Windows 10, Microsoft Word and Outlook vulnerabilities, viruses and malware. Liberty OS does not have this issue – it does not have a monoculture due to its integration and support for diverse, strong software and protocol alternatives. Even if malware or viruses do strike a Liberty OS system, the damage is far more limited and spreading viruses is much more difficult due to the above reasons. Liberty OS by nature is far more secure than Windows 10.

5.1.8. Privacy

Liberty OS's core principles and promises include absolute, complete user privacy, security and control over personal data. Liberty OS never collects any data.

On the other hand, for Windows 10, privacy has been compromised by Microsoft – which they themselves state clearly in their Terms of Service and the Microsoft Privacy Statement: Microsoft collects huge amounts of data from their users and takes advantage of such aggregated data. For example, Microsoft uses Cortana to learn about the way you talk – the more you interact with Cortana, the better it's able to understand you and perform desired actions. However, it gets better because it sends user and usage data actively over to Microsoft. These personal user and usage data are then retained and used by Microsoft to send targeted advertisements on Windows 10, among other uses. It's worth reading Microsoft's privacy policy to understand the full scope and impact of Microsoft's data collection processes.

5.1.9. Updates

"Installing Update 1 of 8". This is a frequent system message observed by Windows 10 users upon system start up, signaling a start to possibly hours of unavoidable operating system updates. Even worse, sometimes Windows 10 can suddenly, without warning, interrupt your work and decide to just update and shut down your computer without warning. Windows 10 performs updates of systems without their users' consent – annoyingly, Windows chooses when it wants to install updates and will suddenly throw up messages saying your computer will be updated and rebooted. Sometimes, these forced Windows updates even break, crash entire systems and devices.

Windows 10's non-cancelable updates sometimes take multiple hours to complete and render the systems unusable in the meantime – these forced actions waste precious hours of productivity or entertainment for Windows 10 users. Another major downside to Windows updates is that, for most updates, one or more hardware reboots is required for the complete installation of said updates – these reboots interrupt user productivity and workflow.

At Liberty Blockchain Technologies, we believe that users should have absolute control over when, and if, certain updates are applied and installed – updates should not be forced upon you. Reboots should never occur without warning and with such high frequency. Of course, Liberty OS systems still need to be updated, since there are constantly security vulnerabilities and improvements being patched all the time. However, with Liberty OS, users can decide when and if they want to

update their systems. If users decide to update, those updates are downloaded and installed seamlessly in the background and become active only after the next system restart (if a restart is needed, which the user performs). Importantly, in most update situations, Liberty OS updates can be installed without the need of an operating system reboot.

5.1.10. Customization

Liberty OS is fully customizable. Users can completely change every aspect of the operating system and can tweak the look and feel of their systems to their liking. Every part of the system can be adjusted to exactly how you like it.

Windows 10 is far more limited in terms of supported tweaks when compared with Liberty OS, which allows the adjustment of everything.

5.2. MACOS

Mac OS is an operating system developed and marketed by Apple Inc. since 2001. The original classic Mac OS was released by Apple in 1984, and has been updated, revamped continuously until the current iteration, which is called Mac OS X. Since the first desktop version of Mac OS was released on March 24, 2001, multiple new versions have been released with newer features and technologies. Since 2011, new releases have been provided on an annual basis.

Within the market of personal and business computing, Mac OS is the second most widely used desktop OS, after Microsoft Windows. Currently, Mac OS controls 14% of the overall PC market globally.

Mac OS is offered officially with Apple's more expensive lines of computers, and provides a restrictive, walled garden approach towards Mac applications and Apple's tightly controlled App Store. Now we take a look at what makes Liberty OS superior to Mac OS.

5.2.1. Cost

Liberty OS can be downloaded for free and installed on any number of machines, additionally offering an unrestricted market of low-cost hardware and software options. On the other hand, Mac OS is an Apple-exclusive operating system, and is only distributed as the primary operating system for Apple's expensive lines of Mac computers.

Apple does not sell Mac OS licenses separately from their computer system offerings, which is currently split into Apple's laptop line (MacBook Air, MacBook Pro) and desktop line (iMac, iMac Pro, Mac mini, Mac Pro) which vary significantly in prices depending on target demographics. However, Apple's offerings are generally priced more expensively than both Liberty OS and Windows systems, with the cheapest Mac OS system being the lower end Mac mini at $799 USD, in the US market.

Apple's tightly controlled hardware and software ecosystem, including Apple's App Store, reduce consumer choices and also contribute to

elevated costs for Mac OS system owners. Such elevated costs include: pricier RAM, storage upgrades, system repair costs and expensive, complementary applications and system software.

5.2.2. Customization

Like the Windows operating system, you can't do any effective, significant customizations in the Mac OS. Most components come pre-defined, pre-installed from the company, and you hardly have any opportunities to personalize or customize the expensive system as you wish.

Liberty OS offers a huge amount of additions and customization options for whatever you wish.

5.2.3. Hardware

Mac OS is only shipped with Apple's own lines Mac computers. On the other hand, any vendor, party, reseller or user can use Liberty OS for free and are thus able to offer their Liberty OS systems for far more competitive prices.

5.2.4. Privacy

With Liberty OS, you fully control the hardware and the software on which your system executes. Such control and emphasis on absolute user privacy include the safety of personal data, secure information flow and safe, stable, trusted processes and applications.

Should Apple wish to push an update for your computer, you are forced to receive it. If Apple wants to track you for any reason such as directed marketing and ads, you have very limited avenues to prevent it.
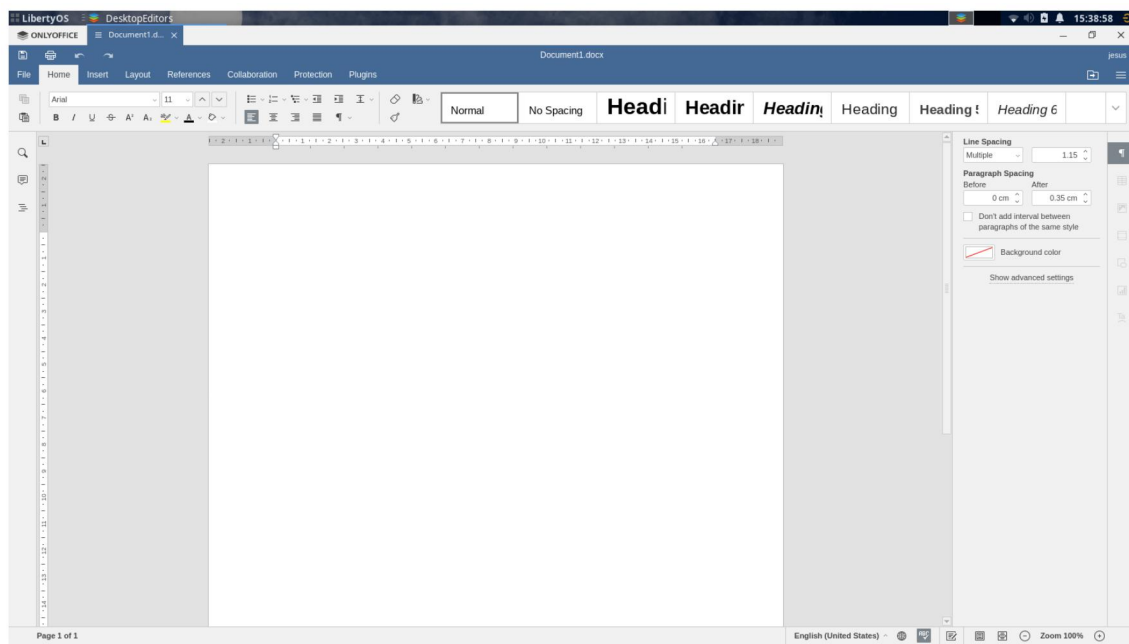
6. ADDITIONAL SCREENSHOTS
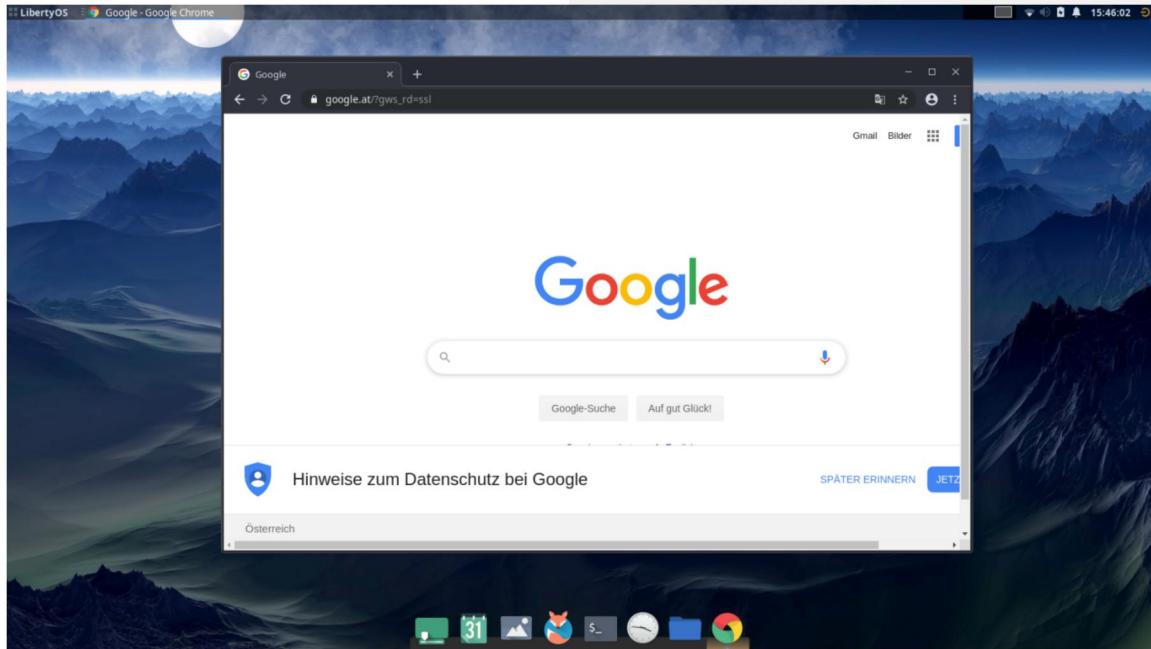

Image 8: LibertyOS Office Suite
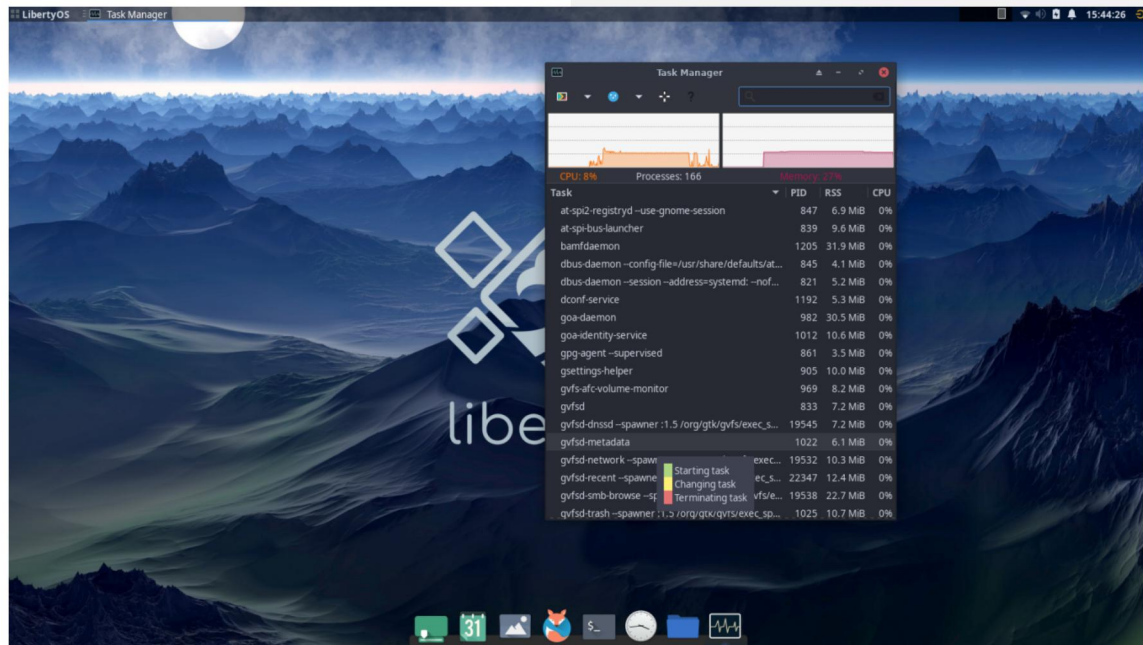
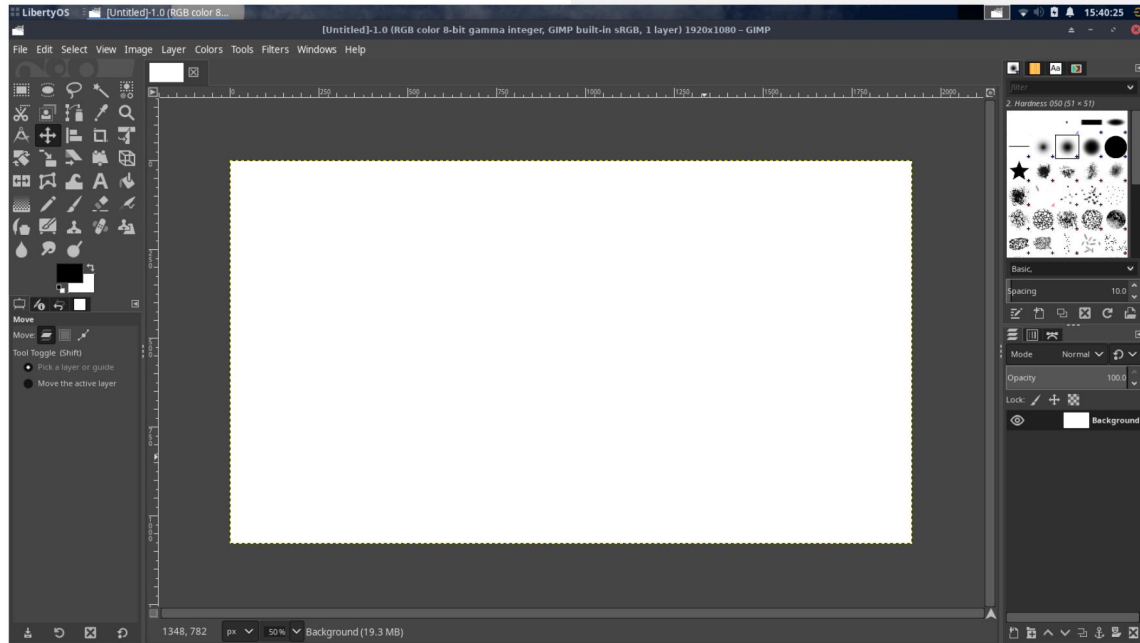*Image 9: Browse the web with LibertyOS*

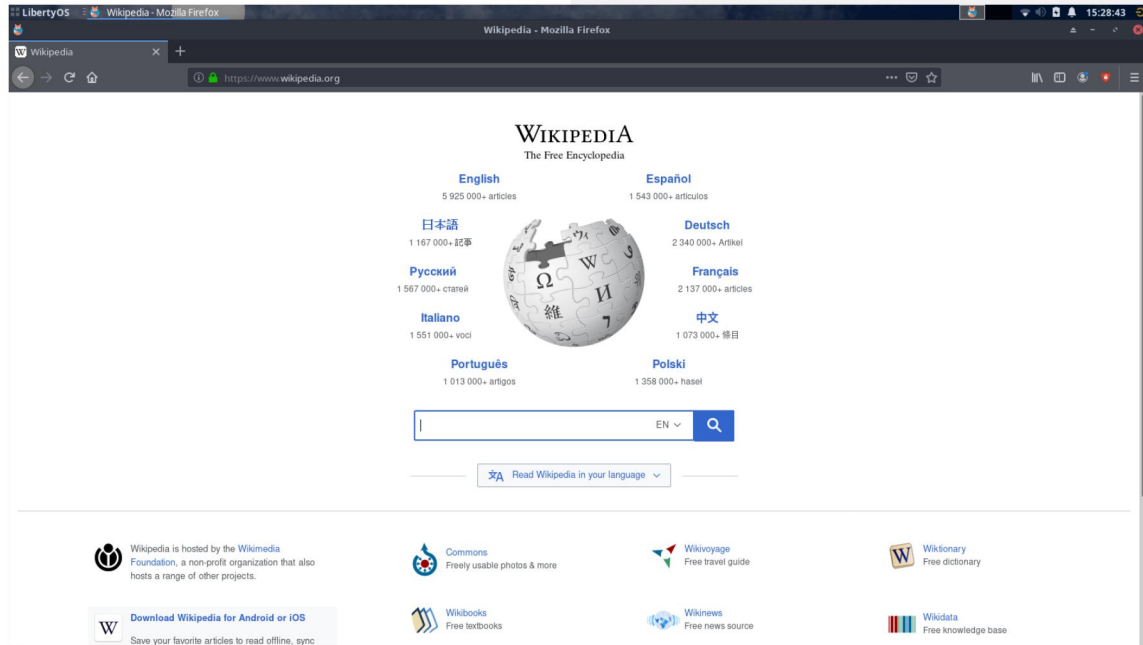*Image 10: System Monitor*

Image 11: Image Processing with LibertyOS

Image 12: Surf the web

Image 13: Attractive File Manager