**Форма звіту Порівняння операційних систем**

**Mac OS, Linux и Windows\***

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До \_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- |
|  | **Windows** | **Linux** | **MacOS** |
| **Системні вимоги** | 1 gigahertz (GHz) or faster compatible processor or System on a Chip (SoC)  RAM: 1 gigabyte (GB) for 32-bit or 2 GB for 64-bit  Hard drive size:  32GB or larger hard disk  Graphics card:  Compatible with DirectX 9 or later with WDDM 1.0 driver  Display: 800x600 | 2 GHz dual core processor.  4 GiB RAM (system memory)  25 GB of hard drive space (or USB stick, memory card or external drive but see LiveCD for an alternative approach)  VGA capable of 1024x768 screen resolution.  Either a CD/DVD drive or a USB port for the installer media. | OS X 10.9 or later  4GB of memory  35.5GB available storage on macOS Sierra or later\*  Mac Hardware: MacBook (2015 or later)  MacBook Air (2013 or later)  MacBook Pro (Late 2013 or later)  Mac mini (2014 or later)  iMac (2014 or later)  iMac Pro (2017 or later)  Mac Pro (2013 or later) |
| **Безпека / захищеність від вірусів** | Ships with Microsoft Defender, but overall safety is POOR | AV software doesn’t exist for linux, but overall safety is GOOD  <https://help.ubuntu.com/stable/ubuntu-help/net-antivirus.html.en> | Thanks to the Unix approach to OS design, overall security is GOOD  <https://www.apple.com/macos/security/> |
| **Стабільність** | ++ | ++ | +++ |
| **Ефективність** | ? | ? | ? |
| **Підтримка ПО** | GOOD, BUT lacks some design software (Sketch) and Audio/Video editing.  Server and programming software needs to be installed separately.  Software is installed individually. A repository (App store) exists, but is still POOR | Better than in the past, but POOR. E.g. NO Adobe products  Some server and programming software is already installed.  Nice SW repository with built-in one command (apt-get) installation process | GOOD, but no Autodesk products  Some server and programming software is already installed.  SW repository (App Store) works fine, on-command installation tool exists but needs ro be installed separately (homebrew) |
| **Графічне середовище (ГС)** | Proprietary, built-in | Ships with GNOME, can be changed | Proprietary, built-in |
| **Робочі столи** | Yes | Yes | Yes |
| **Зручність у використанні** | * ? | ? | ? |
| **Процес установки і настройки ОС** | * <https://www.youtube.com/watch?v=l9GnWYKyyYo> | <https://www.youtube.com/watch?v=G7ffzC4S0A4> | <https://www.youtube.com/watch?v=AlYCQgxDRQs> |
| **Розмір образів** | * 15 GB | 2.7GB | 13 GB |
| **Витрачений час на установку** | 15 minutes to 3 hours  <https://www.minitool.com/backup-tips/how-long-take-install-windows-10.html> | 10-20 minutes  <https://help.ubuntu.com/community/Installation/FromUSBStickQuick#:~:text=The%20installation%20will%20begin%2C%20and,Ubuntu%20should%20start%20to%20load>. | 30 to 45 minutes  <https://www.quora.com/Why-does-it-take-so-long-to-install-OSX-on-Macs#:~:text=macOS%20generally%20takes%2030%20to,babysitting%20to%20get%20to%20completion>. |
| **Наявність драйверів і підтримка** | * +++++ * BEST (all consumer hardware) | +++  GOOD (majority of hardware, much better than years ago) | ++++  GOOD (all major hardware) |
| **Програми, які можна встановити додатково** | * ? | ? | ? |

\* Розглянуті наступні версії

* Windows: 10 20H2,
* MacOS: Big Sur 11.2.1,
* Linux:Ubuntu 20.04