Generation Logo. A black and white sign



**Note-Taking Document: LINUX-1**

In this document, we have compiled some guiding questions for you to check for understanding as you move through the ACG content. Feel free to make modifications and engage with this document in a way that best supports your learning.

**Session 1**

| **Questions/Main ideas** | **Notes** | |
| --- | --- | --- |
| How would you define distributions? | **A distribution is a collection of components that from a kernel system such as debain , fedora , oracle etc.** | |
| What are 2 facts you learned about distributions? | 1)  **Graphical Interface** *lsb\_realse -a*  **X server** *sudo X -version*  **GNU Core** *ls --vesion*  **Linux Kernel** *uname -r*  **>**  **Hardware**  2)  **Distro Details**  Default Desktop: **Gnome**  Package Manage: **RMP, DPKG/DEB**  Init Software: **systemd**  Release Model: **Fixed, Rolling** | |
| What are 2 facts you have learned about embedded systems? | **2 different application systems such as android or raspberry pi could run on same hardware components by using networking and file systems.**  **This kind of systems could be embedded on modems, drones or tvs.** | |
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| **Video Notes: Linux in the Cloud** | |
| --- | --- |
| **The Cloud** | MS Azure, AWS, GCP |
| **Region** | Shortest physical path between users and region |
| **Availability Zone** | Data Centers |
| **Subnet** | VM, Replica Systems, Local Networks |
| **Additional Notes:** | |

**Session 2**

| **Questions/Main ideas** | **Notes** |
| --- | --- |
| What are two facts you learned about open source desktop applications? | **Open source application use to free and could be contributor by anyone to development it.** |
| What are two open source applications you are less familiar with but would like to learn more about? | **OpenOffice and Firefox** |
| Note 1-2 facts for each type of development language. | **Shell-Bash, Python** |
| What are definitions and/or examples of:   * dependencies repositories | **RPM based** *apt-get*  **DPKG/DEB based** *yum* |
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| **Server Applications: open source applications that provide client services** | |
| --- | --- |
| **Web Server**  Proxy  Load balancing | **Apache** permits web content to be served by the host, and may use compiled modules to extend the core functionality of the service.  Means that it can balance incoming requests, **NGINX** is web server that can be used for reverse proxy, mail proxy and HTTP caching |
| **Database Server**  LAMP stack  fork | **MySQL** is open-source relational database management system.  **MariaDB** is community developed fork of MYSQL |
| **File Sharing** | **Samba** is open-source file sharing software for Linux that permits file sharing with Windows clients through *Common Internet File System (CIFS)* |
| **Private Cloud Applications** | ownCloud and Nextcloud |
|  | |



**Session 3**

| **Questions/Main ideas** | **Notes** |
| --- | --- |
| How is forking related to open source? | **The basic premise of open-source software is that the source code is available for anyone to use freely.**  **We could fork entirely project to make new one.** |
| What is permissive licensing? | **No restrictions on licensing derivative work** |
| What is copyleft? | **Must same license** |
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| --- |
| “Open-source licensing provides rules and guidelines for how the work may be used, permitting others to contribute without first seeking permission.” |

| **Open SourceLicense Examples** | **Notes** |
| --- | --- |
| **Public Domain**  CCO 1.0 Universal | least |
| **Permissive**  BSD | Restrictions |
| **Copyleft**  GPL | Most |

**Two movements that place approvals on open source software licenses**

**FSF**

**OSI**

FLOSS

FOSS

**Session 4**

| **Questions/Main ideas** | **Notes** |
| --- | --- |
| What are **two important takeaways** from the video “Getting to the Command Line” |  |
| What are **two new facts** you have learned? |  |
| According to the video, what is the "power and beauty" of working with the command line environment? |  |
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| **Desktop Skills - Video Notes** | |
| --- | --- |
| **Popular Linux desktop environments** | LXDE  XFCE  Mate  Cinnamon  Gnome  Unity  KDE |
| **Userspace and privacy**  **Root** |  |
| The video uses Ubuntu distribution as an example of desktop computing. What are two takeaways you learned from this portion of the video? | |
|
| **Additional notes:** | |

Industry use of Linux: How Linux is used in virtualization and cloud computing.

**Virtualization**

**Cloud Computing**