Certificate in Open Systems IT Management

Suggested Project for Teaching

Unit 4 of this qualification is learner's planing something using open systems. The rest of the Units are what hardware and software they need to meet the project needs, what sort of configuration, and how the open source community works and functions. As a suggestion, you could do the following:

- Students create a plan to install and configure a VLE for a local primary school or a Squid proxy and filtering server.
- They need to specify and install the system using all of the main tools available and then present this to the school with documentation.

Moodle is a popular open source VLE which is well documented for support and installation. Students can use an old computer to install the system which will cover almost all of the criteria in this qualification and give them vital skills in managing a real project. There are a series of videos here [1] to give an overview of how this could be done. Part 7 [2] of the videos is the project suggestion, the rest are details on hardware and software.

Some useful tutorials can be found here [3]

Resources
Linux Overview [4]

Linux in Industry [5]

Practice distro [6]

If schools or colleges become Cisco Academies [7] (which is free), they can use their excellent Linux teaching materials.

Level 2, Unit 1 - Understanding Global Software Communities and their Products (5 credits)

1. Understand community philosophy and ethics

1.1 I can describe the principles of software freedom [8]

1.2 I can compare open source and closed source licenses [10]

1.3 I can describe the distribution methods for open source software [12]

2. Know key software platforms and associated applications

2.1 I can identify large scale open source projects [9]

2.2 I can explain differences between software platforms [11]

2.3 I can explain the terms platform, cross- platform and application [13]

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1.4 I can explain differences in open source licenses [14]

2.4 I can explain the terms distro, cycle, beta, release candidate, repository and library [15]

2.5 I can describe computer development languages and supporting tools [16]

2.6 I can identify open source applications that are equivalent to closed source products in the work place [17]

2.7 I can identify embedded systems and describe their function [18]

Level 2, Unit 2 - Using an operating system efficiently (5 credits)

1. Use a range of desktop management tools

1.1 I can navigate a graphical user interface [20]

1.2 I can use help and searches to extend learning [22]

1.3 I can adjust systems settings [24]

1.4 I can improve productivity using tools and widgets [26]

2. Use the command line for systems management

2.1 I can open a terminal and set suitable permissions for operations [21]

2.2 I can Install applications from the command line [23]

2.3 I can get help from the command line [25]

2.4 I can perform common operations on files from the command line [27]

2.5 I can produce short scripts to automate sequences of instructions [28]

Level 2, Unit 3 - Managing computer hardware systems and networks (5 credits)

1. Understand computer hardware

2. Understand the computer on a network

3. Manage systems effectively

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1.1 I can identify the main hardware components in computing devices [30]

1.2 I can match discreet components in computing devices to purpose [33]

1.3 I can associate software drivers with hardware [36]

1.4 I can format and partition discs [39]

1.5 I can install an operating system [42]

2.1 I can describe the purpose of a Domain Name Service (DNS) [31]

2.2 I can identify a range of network services [34]

2.3 I can use common services to diagnose problems [37]

2.4 I can create new user and group accounts [40]

2.5 I can use a browser with appropriate attention to privacy [43]

2.6 I can connect a computer to a network [45]

3.1 I can review security for users and groups [32]

3.2 I can identify important systems files and directories [35]

3.3 I can archive and de-archive files using compression [38]

3.4 I can describe the purpose of file and directory types (public, private, hidden) [41]

3.5 I can manage files within a directory structure [44]

3.6 I can explain a directory structure in terms of its function [46]

3.7 I can explain the difference between an absolute and relative path [47]

3.8 I can make and restore simple backups and archives [48]

Level 2, Unit 4 - Carrying out an IT systems management project (5 credits)

1. Plan systems management projects

1.1 I can make a project proposal and justify it [50]

1.2 I can carry out a risk assessment for a project [53]

2. Apply practical skills and knowledge in a synoptic context

2.1 I can set up hardware and software to meet needs [51]

2.2 I can record process and procedures [54]

3. Present results effectively

3.1 I can organise results into a logical structure [52]

3.2 I can use media to enable updates for a wide audience [55]

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- 1.3 I can produce a project plan [56]
- 2.3 I can evaluate process and procedures [57]
- 3.3 I can make a presentation to a critical audience [58]
- 2.4 I can make improvements based on evaluation [59]
- 3.4 I can receive feedback and act on it [60]

Source URL: https://theingots.org/community/Open_Systems_Management

Links
[1] http://mediadrop.tlm-test-server.co.uk:8081/categories/open-systems-management
[2] http://mediadrop.tlm-test-server.co.uk:8081/media/open-systems-management-project-suggestion
[3] http://www.guru99.com
[4] https://theingots.org/community/sites/default/files/uploads/user4107/Linux_Linux%20Overview_110416.pdf
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[7] https://www.netacad.com/get-started/educators/
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[30] https://theingots.org/community/sysml2u3x#1.1
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[34] https://theingots.org/community/sysml2u3x#2.2
[35] https://theingots.org/community/sysml2u3x#3.2
[36] https://theingots.org/community/sysml2u3x#1.3

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[60] https://theingots.org/community/sysml2u4x#3.4
[61] https://theingots.org/community/sysml2u4i

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