

ASC & ITC i-com-unity o.s.

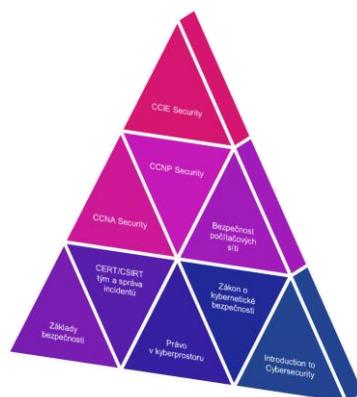


Martin Pruša
prezident, i-com-unity o.s.



Kurzy

- IT Essentials (česká lokalizace)
- CCNA
 - CCNA1 – Introduction to Networks
 - CCNA2 – Routing and Switching Essentials
 - CCNA3 – Scaling Networks
 - CCNA4 – Connectings Networks
- CCNA Security
- CCNP
 - CCNP Route
 - CCNP Switch
 - CCNP Tshoot
- NDG Linux Essentials
- Linux Professional Institute Certification 101 & 102
- Introduction to the Internet of Everything
- Introduction to Cybersecurity
- Bezpečnost
- VoIP
- Bezdrátové technologie



Ukázka studijních materiálů

Cisco Networking Academy

Chapter 6: Networks > 6.0.1.1 Introduction

6.0 Networks
- 6.0.1 Introduction
- 6.0.1.1 Introduction

6.1 Principles of Networking
6.2 Identifying Networks
6.3 Basic Networking Concepts and Technologies
6.4 Physical Components of a Network
6.5 Ethernet Standards
6.6 IEEE 802 and TCP/IP Data Models
6.7 Computer to Network Connection
6.8 Select an ISP Connection Type
6.9 Common Preventative Maintenance Techniques Used on Networks
6.10 Troubleshooting Process for Networks
6.11 Troubleshooting Process for Networks
6.12 Networks

Networks
Introduction

This chapter provides an overview of network principles, standards, and purposes. Different types of network topologies, protocols, and components required for hardware needed to create a network will be discussed in this chapter. In addition, network components, their functions, and how they are installed and configured, troubleshooting, and preventive maintenance will be covered. You will learn about network software, communication methods, and hardware relationships.

To meet the expectations and needs of your customers and network users, you must be

Full text
Počítačové sítě
Ověd

Kapitola poskytuje přehled základních principů, standardů a cílů sítí. Různé typy sítí a protokoly, které jsou potřeba pro vytvoření sítě, jsou v tomto rozsahu uvedeny. Kromě toho jsou popsány součásti sítí, jejich funkce a instalace a konfigurace, řešení problémů a preventivní údržba. Dostatečné informace o tom, jak optimalizovat výkon sítě, jsou zde uvedeny. V tomto rozsahu je také uvedeno, že je nutné pochopit softwarové a komunikační metody, až budete mít možnost využít hardwarového vybavení.

Dle se v této kapitole budeme věnovat různým druhům sítí a jejich protokolům a kryptografickým algoritmy, které jsou používány pro vytvoření počítačové sítě. Nezaměřujeme se na konkrétní typ sítě, ale na všechny součásti sítě, které jsou potřebny pro vytvoření sítě. Kromě toho se dozvídáte, jak optimalizovat výkon sítě a jak řešit problémy sítě. V tomto rozsahu je také uvedeno, že je nutné pochopit softwarové a komunikační metody, až budete mít možnost využít hardwarového vybavení.

6.0.1.1

© 2013 i-com-unity association. All rights reserved. 3

Ukázka studijních materiálů

Chapter 3 Connecting the Unconnected ► 3.1 Introduction to Connecting Things ► 3.1.1 Things to Connect ► 3.1.1.2 Connecting Things for Consumers

Home Wireless Local Area Network (WLAN)

Internet Service Provider (ISP)

Router

Smart TV

Laptop

Gaming Console

Smartphone

Entertainment System

Connecting Things for Consumers

How does connecting things impact us in our personal life? For example, consider the current structure of the average home network.

The home network is a LAN with devices that connect to the home router. Most likely, the router also has wireless capabilities. In this instance, the LAN provides wireless LAN (WLAN) access. Figure 1 shows a typical home WLAN with a connection to the Internet through a local Internet Service Provider (ISP). The collection of devices and connections within the ISP are not visible to the home-based customer but are critical for connectivity to the Internet.

The local ISP connects with other ISPs, allowing access to websites and content around the world. These ISPs connect to each other using various technologies that include WAN technologies, as shown in Figure 2.

Figures

© 2013 i-com-unity association. All rights reserved. 4

Ukázka studijních materiálů

NDG Linux Essentials

[CHAPTER 1 - INTRODUCTION TO LINUX](#)

[Introduction](#)

[Linux Essentials Exam Objectives](#)

[Linux Evolution and Popular Operating Systems](#)

[Role of the Kernel](#)

[Application](#)

[Role of Open Source](#)

[Linux Distributions](#)

[What is a Command?](#)

[Hardware Platforms](#)

[Choosing an Operating System](#)

[Decision Points](#)

[Microsoft Windows](#)

[Apple OS X](#)

[BSD](#)

[Other Commercial UNIXes](#)

[Linux](#)

1.3.4 Linux Distributions

Take Linux and the GNU tools, add common system utility applications like an email client, and you have a full Linux system. People started bundling all this software into a distribution almost as soon as Linux became useful. The distribution takes care of setting up the storage, installing the kernel, and installing the rest of the software. The full featured distributions also include tools to manage the system and a package manager to help you add and remove software after the installation is complete.

Like UNIX, there are many different flavors of distributions. These days, there are distributions that focus on running servers, desktops, or even mobile-specific tools like electronic design or statistical modeling. The major players in the market can be broken back to either **Red Hat** or **Debian**. The most visible difference is the package manager, though you will find other differences on everything from file locations to political philosophies.

Red Hat started out as a simple distribution that introduced the Red Hat Package Manager (RPM). The developer eventually formed a company around it which tried to commercialize a Linux distribution. At the same time, Red Hat's competitors focused more on desktop environments such as web and file serving, and founded Red Hat Enterprise Linux, which was a paid service on a long lifecycle. The release cycle dictates how often software is upgraded. A business may value stability and want long release cycles, a hobbyist or a startup may want the latest software and opt for a shorter release cycle. To satisfy the latter group, Red Hat sponsors the **Fedora Project** which is a personal desktop comprising the latest software, but still built on the same principles as the enterprise version.

Because everything in Red Hat Enterprise Linux is open source, a project called **CentOS** came to be, that recompiled all the RHEL packages and gave them away for free. CentOS and others like it (such as **Scientific Linux**) are largely compatible with RHEL and integrate some newer software, but do not offer the paid support that Red Hat does.

Debian is more of a community effort, and as such, also promotes the use of open source software and adherence to standards. Debian came up with its own package management system based on the `deb` file format. While Red Hat leaves out Intel and AMD platform support to derivative projects, Debian supports many of these platforms directly.

Ubuntu is the most popular Debian derived distribution. It is the creation of Canonical, a company that was made to further the growth of Ubuntu and make money by providing support.

[← Previous](#) [Next →](#)

[Show/Hide](#)

>_ Linux Terminal

```
* Starting Apache2 main service ... [blue@red ~]
```

Welcome to Ubuntu 12.04.1 LTS (GNU/Linux 3.17.8-44-generic)

```
* Documentation: https://help.ubuntu.com/
```

```
* This laptop has an Intel(R) Dual Band Wireless-AC 7265
```

```
* This user has no login shell accounts (username :: password :)
```

```
* This user has no sudo privileges
```

```
* sysctl: 44 modules loaded
```

Press the [Enter] key to begin...

The programs included with the Ubuntu system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law.

[Close](#)

Aktuální akce

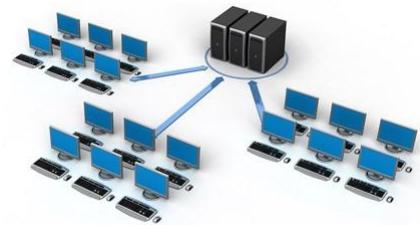
- Newsletter
 - CUSF
 - NAG 2015 (10. ročník)
 - Technokrati
 - eSkills for jobs 2014
 - Webináře
 - Semináře
 - Výroční konference (2015 – Plzeň)
 - **ITE lokalizace**
 - **NSK**
 - **Bezpečnost**
 - **Spolupráce s firmami a organizacemi**



© 2013 i-community association. All rights reserved.

i-com-unity v číslech

- 80 akademíí po celé ČR
- 277 lektorů
- Od 1.9.2014:
 - 4100+ studentů CCNA
 - 1400+ studentů ITE



© 2013 i-com-unity association. All rights reserved.

7

**ASC & ITC
i-com-unity o.s.**

www.i-com-unity.cz

