

# OKR124

## Administering of Red Hat based operating systems I

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### Description:

The three-day course is designed for novice Linux administrators. It aims to provide students with the basic knowledge needed to manage the system, it is an introductory course to courses OKR134 and OKR254. It includes introduction to the history and the current state of Linux, usage of a graphical interface and help system. It also focuses on system administration, file system, database of users and groups, access rights and software, using the shell, text editors and virtualization. Training is delivered on Rocky Linux distribution, which has the same core as Red Hat.

### Students will be able to:

- Use command line
- Work with configuration files
- Manage local users
- Set up services

### Course requirements:

Basic knowledge about networks

### This course is intended for:

- Microsoft Windows system administrators who need to quickly gain a basic knowledge of Linux
- System administrators, network administrators and IT professionals who need to have the skills to perform basic tasks in Linux
- IT professionals using other platforms who want to become a Linux system administrators

### Literature:

Book RHCSA/RHCE Red Hat Linux Certification Study Guide - common for all OKR courses.

### Hardware:

Classrooms are equipped with high-performance computers with Internet access and the possibility of wireless connection.

## Syllabus:

### <h3>Introduction</h3>

<ul>

<li>History of Linux</li>

<li>Distribution</li>

</ul>

### <h3>Command line</h3>

<ul>

<li>Terminal and Shell</li>

<li>Bash</li>

<li>Basic commands</li>

</ul>

### <h3>Managing files in command line</h3>

<ul>

<li>Filesystem Hierarchy Standard</li>

<li>Tools for managing files</li>

</ul>

### <h3>Access to help</h3>

<ul>

<li>Help resources in system</li>

</ul>

### <h3>Creating, viewing and editing files</h3>

<ul>

<li>Viewing files</li>

<li>Editing files</li>

</ul>

### <h3>Local users and groups management</h3>

<ul>

<li>Local databases</li>

<li>User and group management</li>

</ul>

### <h3>Access rights</h3>

<ul>

<li>Managing UGO rights</li>

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### <h3>Monitoring and management of processes</h3>

<ul>

<li>Monitoring processes</li>

<li>Process management</li>

</ul>

### <h3>Service management</h3>

<ul>

<li>Runing services</li>

<li>Enabling and disabling services</li>

</ul>

### <h3>SSH management</h3>

<ul>

<li>Using SSH</li>

<li>Key based authentication</li>

</ul>

<h3>System logging</h3>  
<ul>  
<li>Rsyslog usage and configuration</li>  
<li>Journald usage and configuration</li>  
<li>Log files rotation</li>  
</ul>  
<h3>Network management</h3>  
<ul>  
<li>Network diagnostics</li>  
<li>Temporary configuration</li>  
<li>Non-volatile configuration</li>  
</ul>  
<h3>Archiving and transferring files</h3>  
<ul>  
<li>Archiving and compression</li>  
<li>Secure file transfers</li>  
</ul>  
<h3>Software management</h3>  
<ul>  
<li>Tools for software management</li>  
<li>Repositories</li>  
<li>AppStream</li>  
</ul>  
<h3>Filesystem access</h3>  
<ul>  
<li>Mounting filesystems</li>  
</ul>  
<h3>Web based management</h3>  
<ul>  
<li>Cockpit service</li>  
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