

Data Transfer between User and Kernel Space

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Mayuri Panchakshari

IIT Bombay

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Learning Objective



Learning Objective

In this tutorial, we will learn to copy the data from



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In this tutorial, we will learn to copy the data from

- **Kernel space to the User space**



Learning Objective

In this tutorial, we will learn to copy the data from

- Kernel space to the User space
- User space to the Kernel space



System Requirements



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- VirtualBox 5.2



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- **VirtualBox 5.2**
- **Ubuntu Linux 18.04 LTS**
Operating System



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- Linux kernel version 5.0.0-31
generic



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- gedit text editor



Prerequisites



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- C programming language



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- C programming language
- Basics of Linux kernel



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Prerequisites

- C programming language
- Basics of Linux kernel

If not, then go through the C/C++ and Linux spoken tutorials on this <https://spoken-tutorial.org>



Code files



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- The files used in this tutorial are available in the **Code Files** link on this tutorial page



Code files

- The files used in this tutorial are available in the [Code Files](#) link on this tutorial page
- Please download and extract them



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- Make a copy and then use them while practising



Summary

- **Copy the data from the kernel space to the user space**
- **Copy the data from the user space to the kernel space**



Assignment

- 1 Change the **userData** string in the **user_read_write.c** program
- 2 Load the driver into the kernel and execute the program
- 3 See the output using **dmesg** command
- 4 Unload the driver from the kernel



About the Spoken Tutorial Project

- Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial Project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshop

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates on passing online tests
- For more details, please write to contact@spoken-tutorial.org



Forum questions

- Questions in THIS Spoken Tutorial?
- Visit
<https://forums.spoken-tutorial.org/>
- Choose the minute and second where you have the question
- Explain your question briefly
- The Spoken Tutorial project will ensure an answer

You will have to register to ask questions



Forum to specific questions

- Questions not related to the Spoken Tutorial?
- Do you have general / technical questions on the Embedded Linux Device Driver?
- Please visit the FOSSEE Forum
<https://forums.fossee.in/>
- Choose the Software and post your question



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THANK YOU!

For more Information, visit our website
<https://fossee.in/>

