

Introduction to Xcos

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://www.sakshat.ac.in>

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Objectives

In this tutorial you will learn:

- ▶ **What is Xcos.**



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- ▶ **What is Xcos.**
- ▶ **What is palette.**



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- ▶ **Build block diagrams in Xcos.**



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- ▶ **What is palette.**
- ▶ **Build block diagrams in Xcos.**
- ▶ **Set the parameters of blocks.**



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In this tutorial you will learn:

- ▶ What is Xcos.
- ▶ What is palette.
- ▶ Build block diagrams in Xcos.
- ▶ Set the parameters of blocks.
- ▶ **Setup the simulation parameters.**



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In this tutorial you will learn:

- ▶ **What is Xcos.**
- ▶ **What is palette.**
- ▶ **Build block diagrams in Xcos.**
- ▶ **Set the parameters of blocks.**
- ▶ **Setup the simulation parameters.**
- ▶ **Simulate the constructed block diagram.**



Prerequisites

- ▶ **Scilab should be installed.**



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- ▶ **Scilab should be installed.**
- ▶ **I am using Ubuntu Linux 12.04 and Scilab version 5.3.3 for demonstration.**



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Exercise

**1. Simulate a second order transfer function with damping ratio ζ of 0.5 and angular frequency ω_n equal to 1. Try changing the color of output graph.
(hint: See the block parameters of CSCCOPE)**



Exercise..

2. Using the first exercise, plot the Step input and the output (step response) in a single plot window. (hint: Use CMSCOPE block)



Summary

In this tutorial we have learnt to:

- ▶ **Create xcos simulation diagrams using the palette browser**
- ▶ **Configure each block as per the simulation requirements**
- ▶ **Setup the simulation parameters**
- ▶ **Save the output plot.**



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About the Spoken Tutorial Project

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The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Acknowledgements

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- ▶ **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- ▶ **More information on this Mission is available at**

<http://spoken-tutorial.org/NMEICT-Intro>



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