Sandhi Open Source Visual Programming Software

Ambikeshwar Srivastava FOSSEE, IIT Bombay Manoj Gudi CTO, Focus Analytics

August 22,2015





Introduction

- Sandhi is a visual programming editor based on GNU Radio
- Basic data structure in sandhi is the flowgraph
- It has been named Sandhi as it means connecting and conveys our idea of connecting various blocks to come up with a robust visual program
- Sandhi is aimed to become a visual programming tool for replacing LabVIEW





Flowgraph

- Flowgraph represents the connections of the blocks through which a continuous stream of samples flows
- The concept of a flowgraph is an acyclic directional graph with one or more source blocks (to insert samples into the flowgraph), one or more sink blocks (to terminate or export samples from the flowgraph), and any functional blocks in between.





Motivation to develop Sandhi

- Lack of proper open source alternative to LabVIEW.
- Expensive proprietary software.
- Being FOSS, it gives you freedom to modify, share and sell your application without any permission.





Why GNU Radio?

- GNURadio is a very promising visual programming tool as:
 - it make very easy for the developer to abstract his code
 - provides a very easy to use framework to the developer
 - it is open source





What is GNU Radio



