



ADR - Audio Data Ring
a soundcard modulator demodulator

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1 Preamble

Thanks to the almighty lord, who gave us the power and the knowledge for creating such a program. Our reason to create it was that we want to make an ultra low budget network. We have come to the idea that every PC has got a soundcard, and why should not we use it for sending Data? To put it in a nutshell: We have created ADR. Hope you enjoy this tool!

2 Motivation

Although network adapters are pretty common used in computers, sending small files to another computer needs always big efforts. Thus, our motivation was to provide a small platform independent tool, to exchange data between to computers using the sound adapter.

3 Background

The tool is actually a Modem (Modulator - Demodulator). Data is converted to soundwaves and after transmitting re-converted into data. This idea is not new at all, but is not used anymore in times of ethernet and wireless lan.

4 Functionality

Any data can be submitted using a speaker and a microphone attached to the computer. Depending on 2 cables which connect the I/O ports of both sound adapters, the transfer rate can be increased.

5 Focus of implementation

Develop or find a most suited protocol to reach a high transfer rate

6 How to handle the programm?

Using this Programm is very easy. Just connect the another Computer with an audio cable from line- in to mic-input and vice versa (not necessary yet). This is all you have to do to create your LAN. Do not forget to switch the audio record mixer of your OS to the line-in. Now your are ready to run the Programm. You will find a menubar *file*. Here you can set the status of your pc on *wait for file...* or you can *send* files. Just click the file you want to send and it will be send. Under *Help* you can find additional infos like the version.