

[RICJn - a decentralized data exchange app for networked data-collections](#)

Modules for DEMO

How TO INSTALL:

WORKS ONLY ON Windows.

You need to install the exec file on two computers connected to each other via LAN.

1. Download and install file crji.exe. An icon will show up in your task bar, on the right corner by the time/date.
2. Right click on the icon and choose "set index": browse to the directory with the documents to be indexed. Choose directory.
3. Click Open in the pop-up window. (you will see the data will being converted to ASCII)
4. After the converting process is over, the window will disappear.
5. Go to the second computer, connected by LAN. Repeat the whole process.
6. Now go back to the icon in the right corner, right click and choose search. You can now search on both indexed libraries.

GENERAL (for a [wiki](#)page)

- generate recursive list of files from given folder

<http://wiki.tcl.tk/3726>

"a recursive lsearch that returns an index list, of the first occurrence of the wanted item, as can be used by lindex or lset, or -1 if the element was not found."

<http://stackoverflow.com/questions/9254467/tuple-and-recursive-list-conversion>

"A recursive list is one which contains a reference to itself":

"a list type defined in terms of itself"

- convert to ascii any pdf and office documents from list

<http://en.wikipedia.org/wiki/ASCII> :

"The American Standard Code for Information Interchange (ASCII, pronunciation: /'æski/ ASS-kee;^[3]) is a character-encoding scheme originally based on the English alphabet. ASCII codes represent text in computers, communications equipment, and other devices that use text. Most modern character-encoding schemes are based on ASCII, though they support many additional characters."

- create indexes from the list of converted files

http://en.wikipedia.org/wiki/Database_index

"A database index is a data structure that improves the speed of data retrieval operations on a database table at the cost of slower writes and increased storage space. Indices can be created using one or more columns of a database table, providing the basis for both rapid random lookups and efficient access of ordered records."

- gui for search and settings

http://en.wikipedia.org/wiki/Graphical_user_interface

"In computing, a graphical user interface (GUI, commonly pronounced gooey^[1]) is a type of user interface that allows users to interact with electronic devices using images rather than text commands."

NETWORK

- udp server engine

http://en.wikipedia.org/wiki/User_Datagram_Protocol

"The User Datagram Protocol (UDP) is one of the core members of the Internet protocol suite, the set of network protocols used for the Internet. With UDP, computer applications can send messages, in this case referred to as datagrams, to other hosts on an Internet Protocol (IP) network without requiring prior communications to set up special transmission channels or data paths."

- udp client

DATABASE

- tables
- users
- nodes

- index
- list

<http://en.wikipedia.org/wiki/Database>

ROADMAP (to be developed in the future)

Modules for FINAL

GENERAL

- generate recursive list of files from given folder
- convert to ascii any pdf and office documents from list
- create indexes from the list of converted files
- gui for search
 - local
 - global
 - settings
 - appearance
 - lists of files
 - indexes of list
 - network
 - user
 - new
 - recomand
 - confirm

NETWORK

- udp server engine
- udp broadcast client
- tcp relay engine
- tcp relay client
- tcp to udp broadcast relay

- tcp server engine
- tcp client

DATABASE

encrypt and decrypt

tables

- keys
- users
- nodes
- settings
- history
- index
- lists