In the setup video is explained how I can make such a cluster.

\url{https://www.youtube.com/watch?v=JtX9lVDsqzg}.

Glasgow Raspberry Pi

\url{http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6679872}

Limited software:

lightweight,

httpd,

servers,

hadoop

\url{http://www.lighttpd.net/}

Raspberry Pi project Glasgow

\url{https://raspberrypicloud.wordpress.com/}

Runs Linux from sanddisk 16 gb

Owncloud

Data storage like dropbox

Raspberry pi cluster

\url{https://www.youtube.com/watch?v=vHJ4ZeXT\_Zc}

Raspberry py 2 windows

\url{http://www.science20.com/the\_conversation/upgraded\_raspberry\_pi\_offers\_windows\_and\_linux-152986}

Teach purpose Cassandra. Seems difficult to self implement.

\url{http://devfluid.tumblr.com/post/49530425707/installing-cassandra-1-2-4-on-raspberry-pi}

testing cassandra server

\url{http://www.linux.com/news/embedded-mobile/mobile-linux/747326-teaching-cassandra-cluster-setups-with-the-raspberry-pi-}

Testing difference

Hadoop

Cassandra

MongoDB

CouchDB

\url{http://www.widriksson.com/raspberry-pi-hadoop-cluster/}

Hadoop cluster

spark possible faster than hadoop

\url{http://spark.apache.org/}

<http://tweakers.net/nieuws/101596/arm-en-ibm-komen-met-nieuw-ontwikkelbordje-voor-internet-of-things-toepassingen.html>

<http://tweakers.net/nieuws/101573/bedrijf-bouwt-eerste-klimaatpositieve-datacenter-in-zweden.html>

\begin{table}[H]

\centering \caption{Variables}

\begin{tabular}{|c|} \hline

\textbf{Input} \\ \hline

Data from SD card \\ \hline

Data from Internet \\ \hline

Electrical Power \\ \hline

Cooling \\ \hline

Measurement tools \\ \hline

\textbf{System} \\ \hline

Operating system (Raspbian) \\ \hline

Measurement software \\ \hline

Processing power \\ \hline

\textbf{Output} \\ \hline

data over network (video stream)\\ \hline

data over HDMI \\ \hline

\end{tabular}

\label{tab:variables}

\end{table}

The system will make use of several variables~\ref{tab:variables}. We can distinguish three types which we need to keep in our mind during the research. We have input variables that define the input. The system has not a lot of variables, because you can choose for example a operating system, but not change the software in the operating system. By using the software of the system we can get the different result in the output variables.

Video streaming for example requires a lot of bandwidth \cite{Adhikari:2012}.

In the cloud there are several storage systems. The cloud storage has become an integral part of our modern and mobile lives. Nowadays people own more often multiple devices. Cloud storage made it possible that the files we as user need are available where and when we want them. There are several ways to do this storage. Dropbox for example stores your information on a local folder on your device, after it has done that it will sync with an online version \cite{drago2012inside, dropbox}. In this way your other devices or the friends you shared the information with will have that information. In this way offline editing is also possible and this makes Dropbox useful especially when sometimes the data centers are not reachable. \newline

@misc{dropbox,

author = {Dropbox},

title = {Share the power of great sync

with external collaborators},

date = {2015},

howpublished = {\url{https://www.dropbox.com/business/uses/file-sharing}},

note = {Last accessed March 2, 2015}

}

@misc{owncloud,

author = {ownCloud},

title = {ownCloud},

date = {2015},

howpublished = {\url{https://owncloud.org/}},

note= {Last accessed March 2, 2015}

}

You might for example use a special processor like the

For example some streaming services will lower the quality if you don't have enough internet connection. This can be done smooth if the server is nearby.

http://www.zdnet.com/article/microservers-what-you-need-to-know-7000011486/