

Mechanizm spójnych komentarzy dla wymiany danych w sieciach P2P

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promotor: dr inż. Anna Kobusińska

Początki

Początki . . .

Początki

ON SENDSYNCHRONIZATION():

```
1 message.file = fileToSynchronize
2 message.node = me
3 message.type = ASKFORSYNC
4 send(message, arbiter, SYNCHRONIZATION)
5 try
6     receiveDecision()
7 catch (arbiterTimeout)
8     startElection()
9     waitForArbiter()
10    return to step 1
```

ON RECEIVESYNCHRONIZATION(ASKFORSYNC):

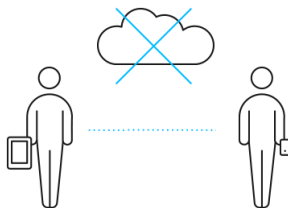
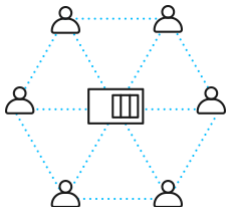
```
    incoming msg type: SynchronizationMessage
1 if me.isArbiter then
2     if msg.file.version > files.getFile(msg.file.id).version then
3         msg.file.version = files.getFile(msg.file.id).version + 1
4         msg.type = AGREED
5         send(msg, msg.node, DECISION)
6     else
7         msg.type = DISAGREED
8         send(msg, msg.node, DECISION)
9 else
10    msg.type = NOTARBITER
11    send(msg, msg.node, DECISION)
```

Początki

```
ON RECEIVESYNCHRONIZATION():  
1  message.file = FileToSynchronize  
2  message.node = me  
3  message.type = ASKFORSYNC  
4  send(message,arbiter,SYNCHRONIZATION)  
5  try  
6    receiveDecision()  
7  catch (arbiterTimeout)  
8    startElection()  
9    waitForArbiter()  
10   return to start
```

```
ON RECEIVESYNCHRONIZATION(ASKFORSYNC):  
    incoming msg type: SynchronizationMessage  
1  if me.isArbiter then  
2    if msg.file.version > file.getFile(msg.file.id).version then  
3      msg.file.version = files.getFile(msg.file.id).version + 1  
4      msg.type = AGREED  
5      send(msg,msg.node,DECISION)  
6    else  
7      msg.type = NOTAGREED  
8      send(msg,msg.node,DECISION)  
9    else  
10     msg.type = NOTARBITER  
11     send(msg,msg.node,DECISION)
```

BTSync

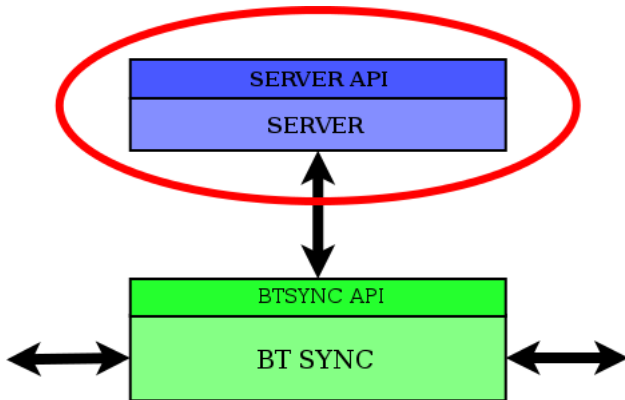


BTSync

BTSync:

- bezpieczeństwo komunikacji (AES-128),
- bezpieczeństwo składowania danych (nie w chmurze),
- szybkość (BitTorrent),
- wieloplatformowość (Windows, Linux, Mac, mobilne OS),
- skalowalność (P2P).

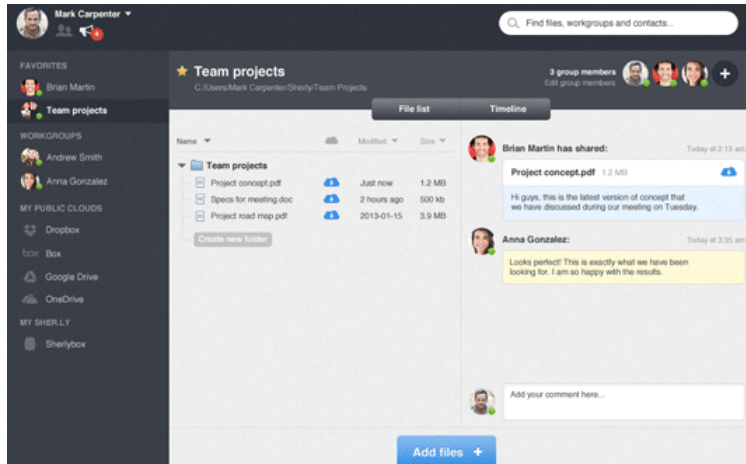
Architektura



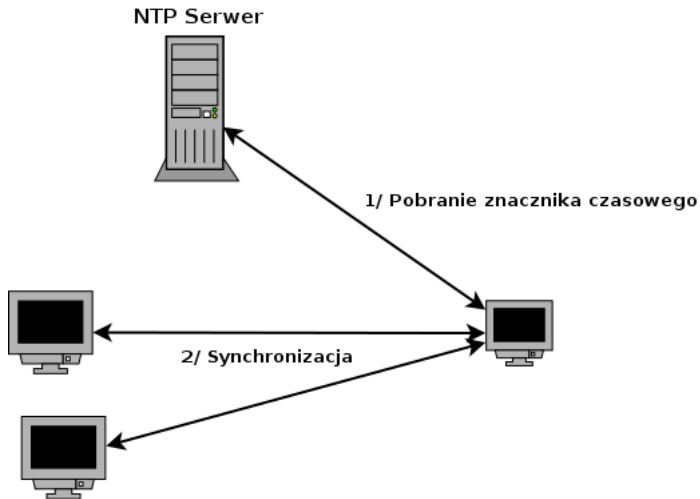
Struktura katalogu

```
.
├── .Comments
│   ├── 2014-02-06-04-44-kot
│   └── 2014-03-26-12-27-ala
├── .Users
│   ├── ala
│   └── kot
├── x.txt
├── y.txt
└── z.txt
```


Interfejs



Komentowanie



Dziękuję za uwagę

DZIĘKUJĘ ZA UWAGĘ

Filip Rachwałak