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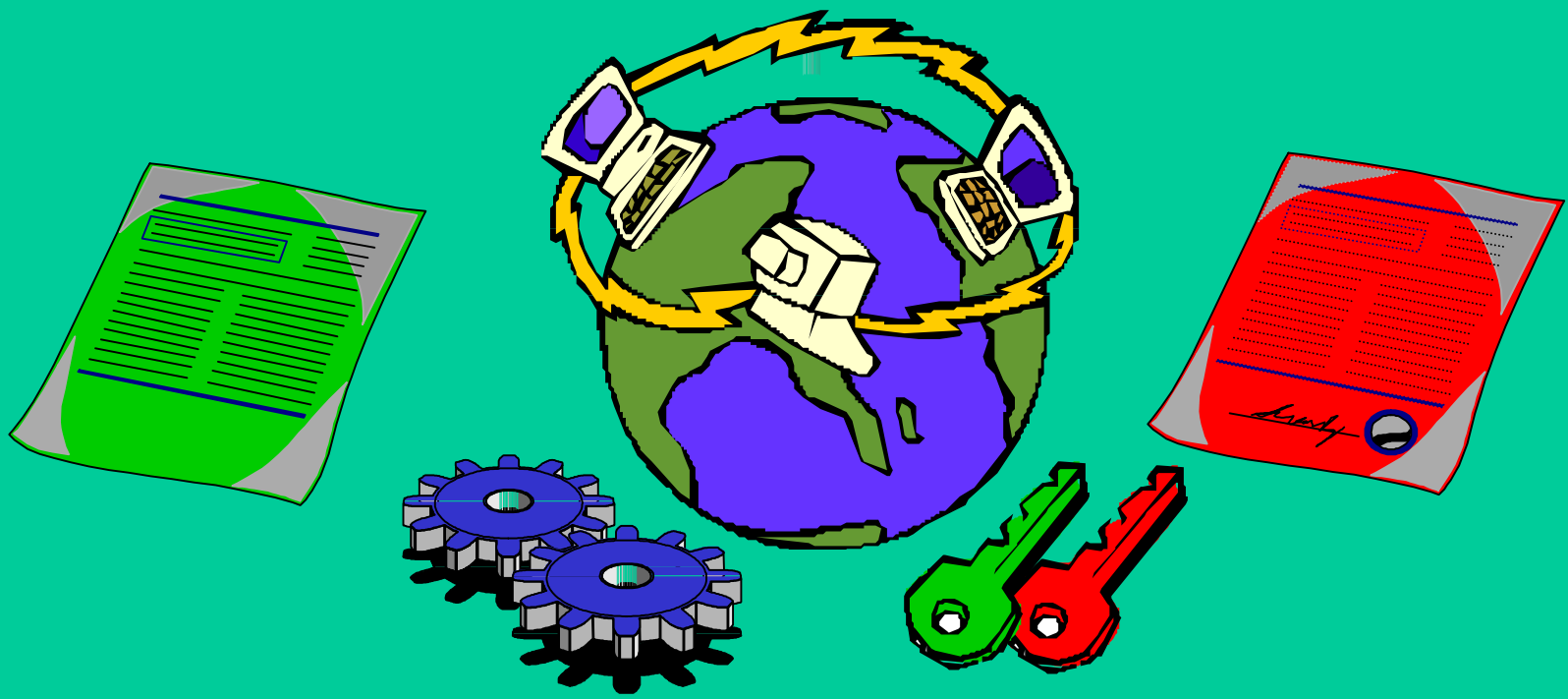


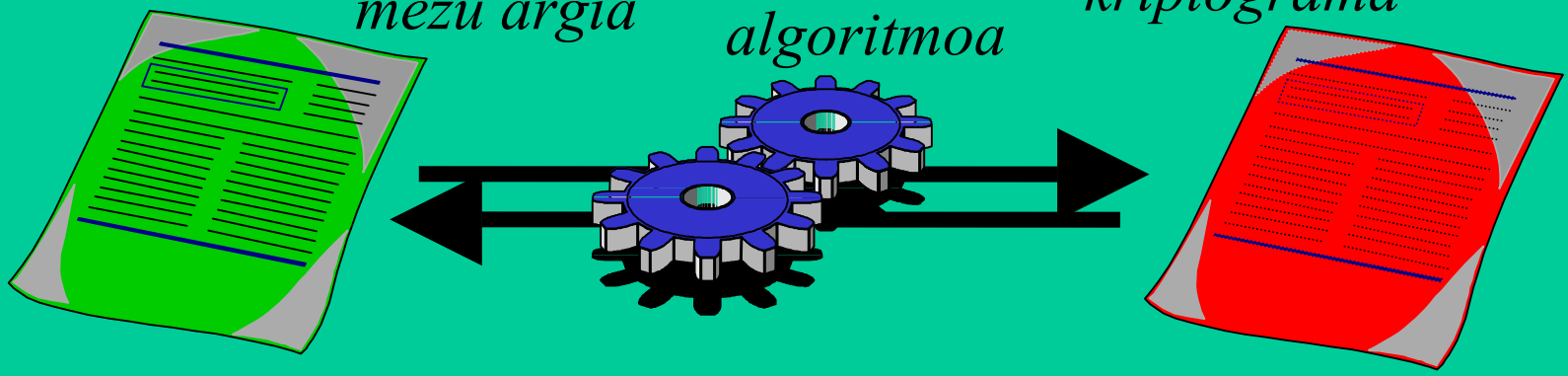
OINARRIAK

Liher Elgezabal

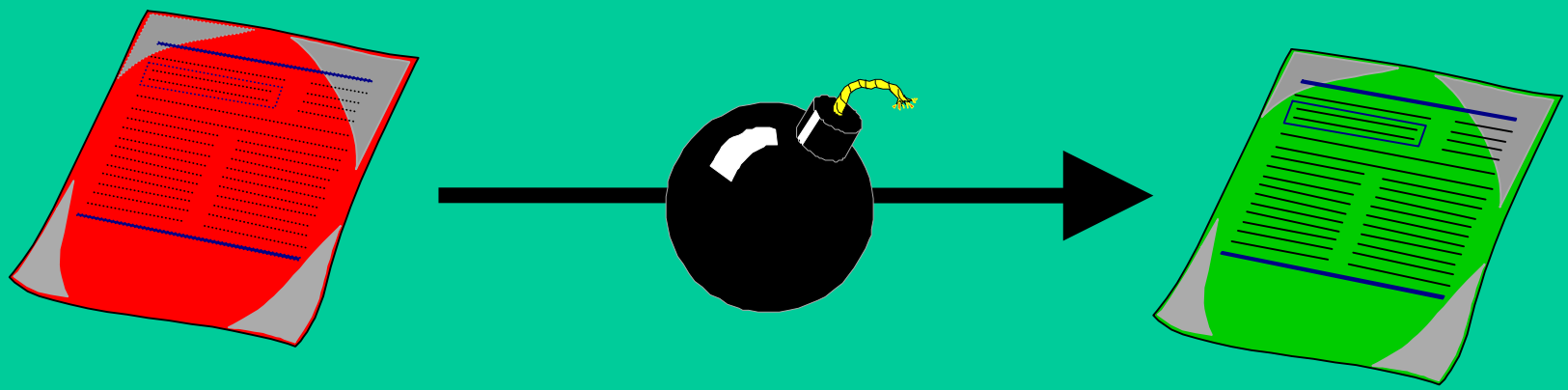
KRIPTOLOGIA

Kriptografia

mezu argia *algoritmoa* *kriptograma*



Kriptoanalisia



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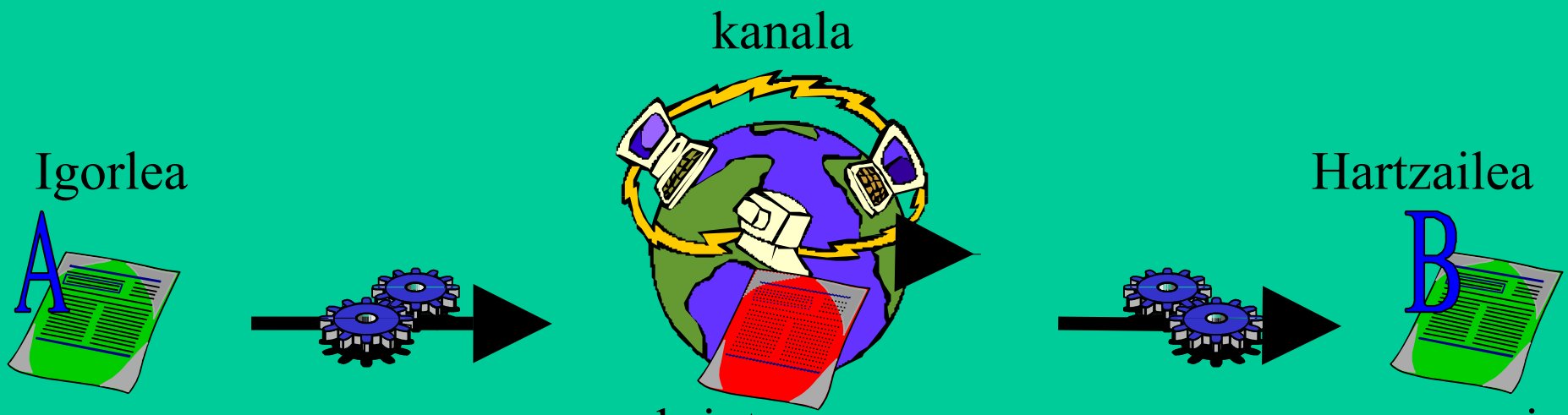

KRIPTOGRAFIA

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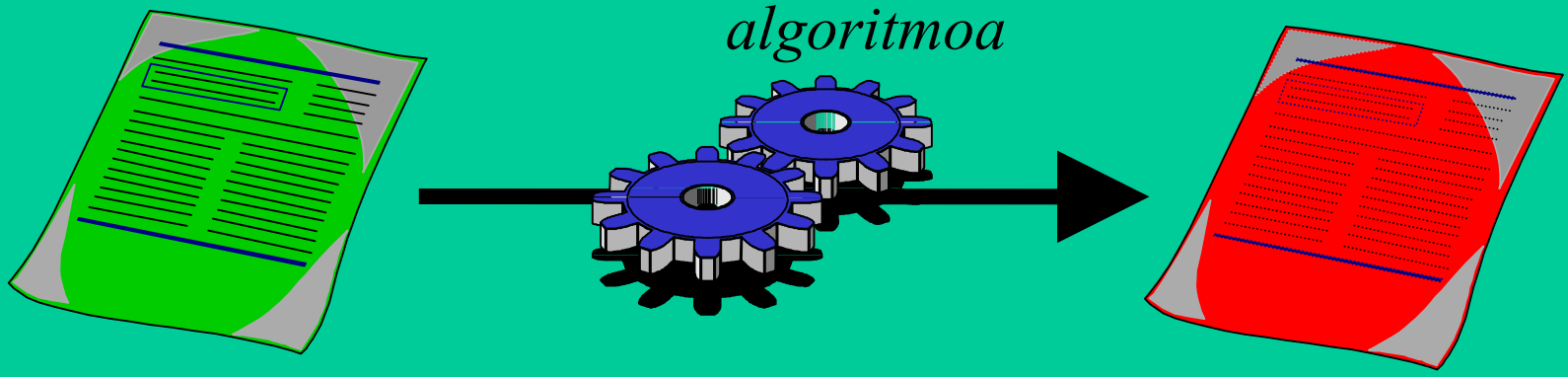

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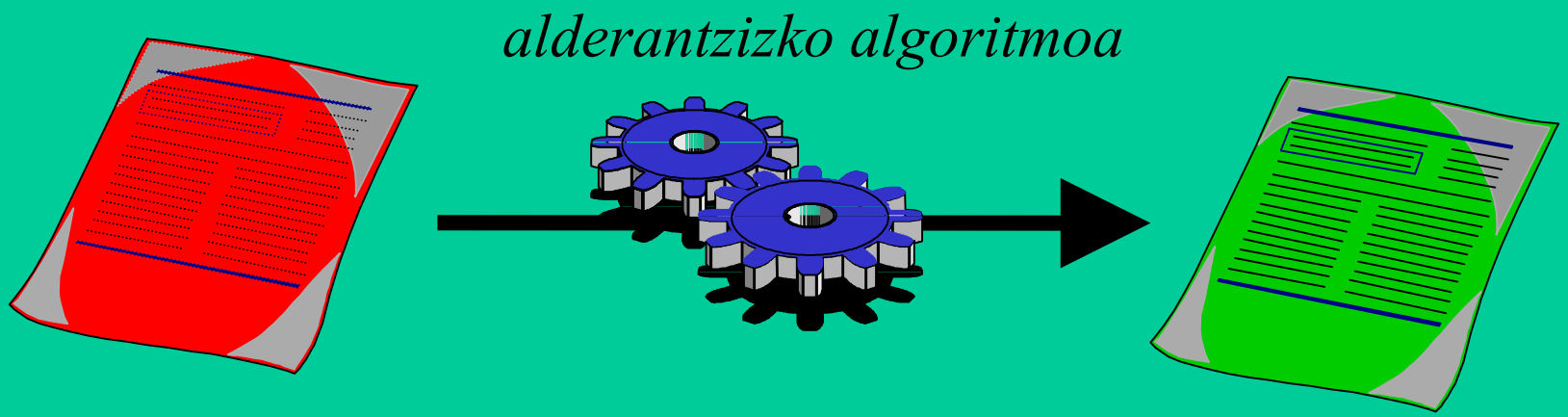


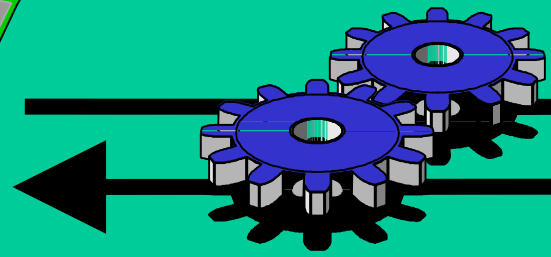
ZIFRATZE TEKNIKAK

Lekualdatzea

hedatzea

argia

kontrako ordena



aigra

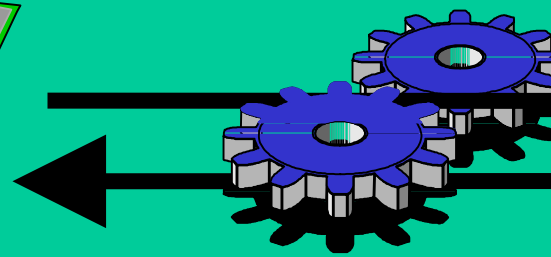
kontrako ordena

Ordezkatzea

nahastea

argia

+3



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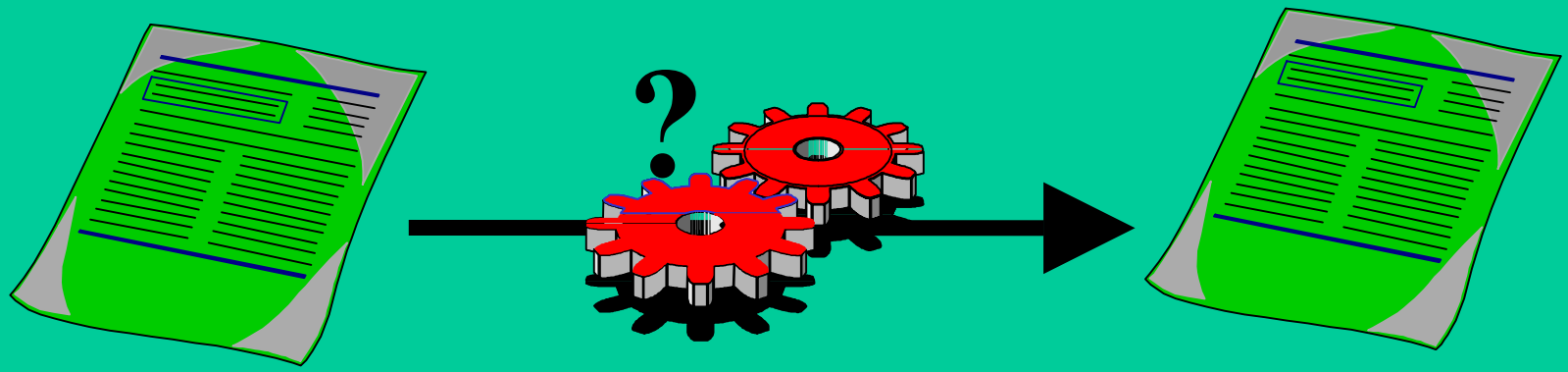
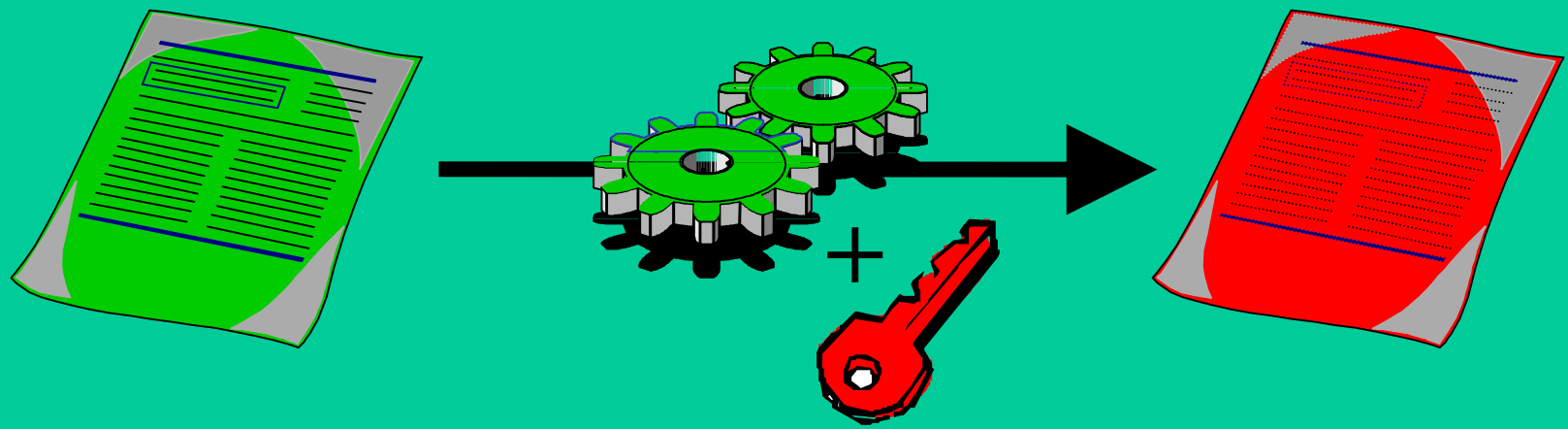
ALGORITMO MOETAK

Algoritmo Sekretua

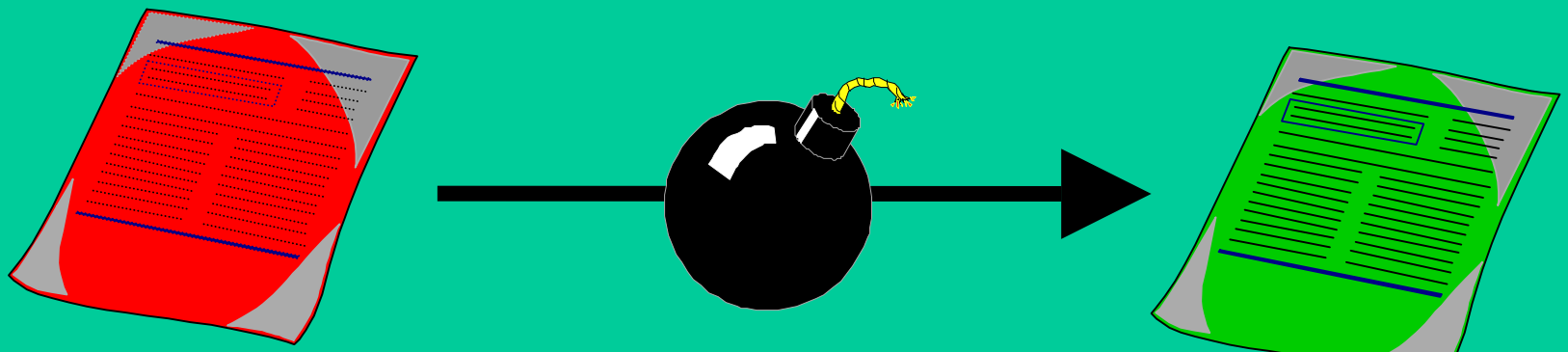


Algoritmo Publikoa
+ Gako Sekretua



KRIPTOANALISIA

Kriptograma deszifratzea



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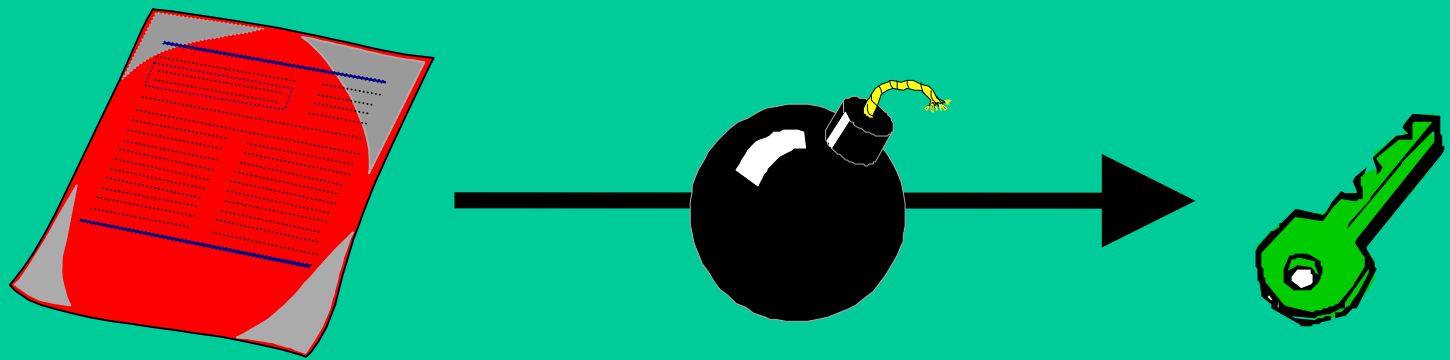
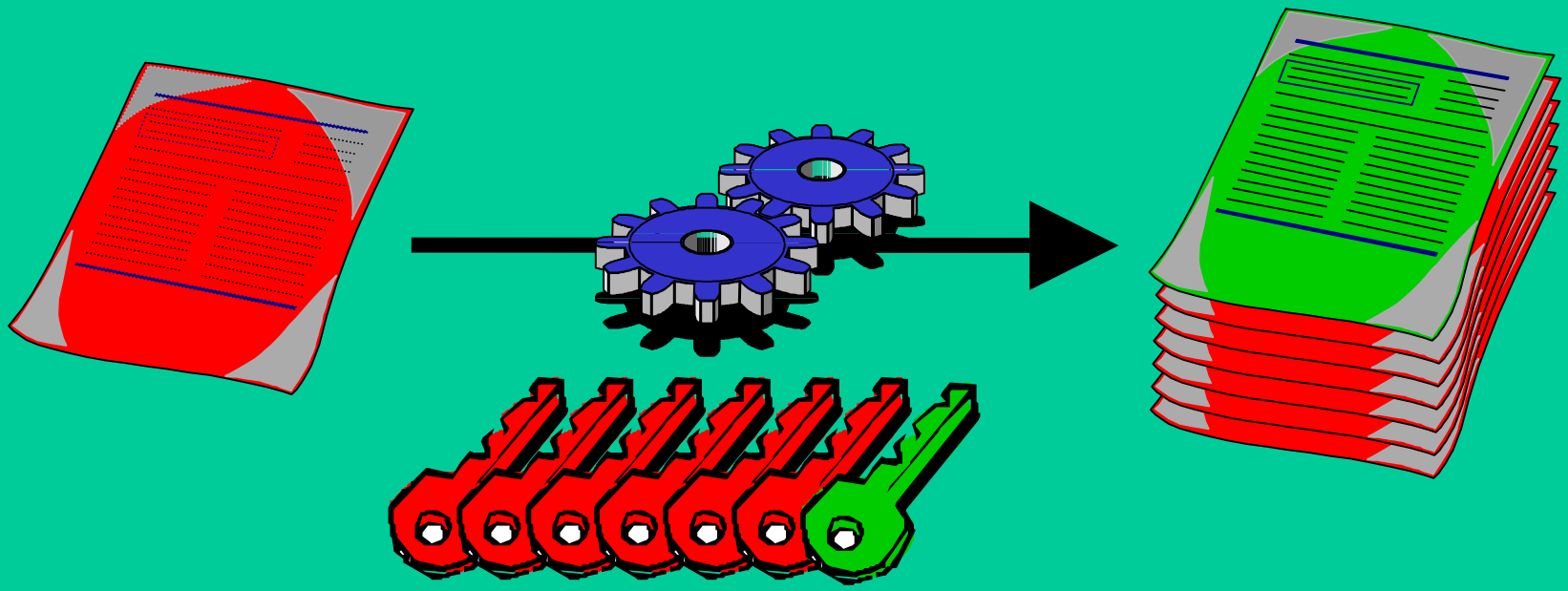
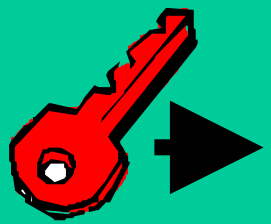


KRIPTOANALISI TEKNIKAK

Indar gorria



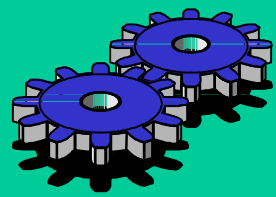


$2^{56}=7{,}2 \cdot 10^{16}$ gako

56 bit

1.000.000 saio/s

1.000.000.000.000 saio/s



1.142 urte

10 ordu

ONDORIOAK

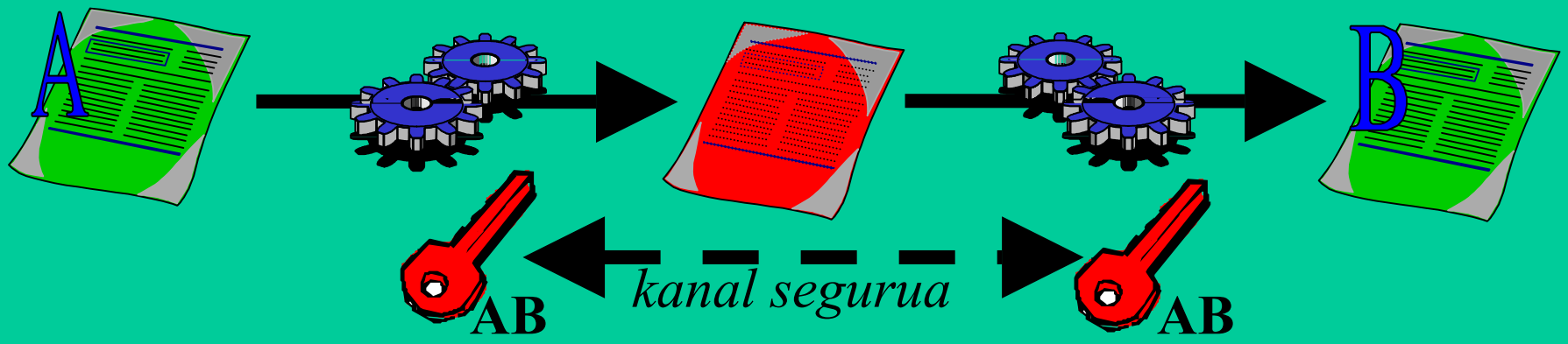
Ez da kriptosistema guztiz segururik existitzen.
Beti proba daitezke gako posible guztiak.

Beraz kriptosistema sendo batek bi baldintza hauek bete beharko ditu:

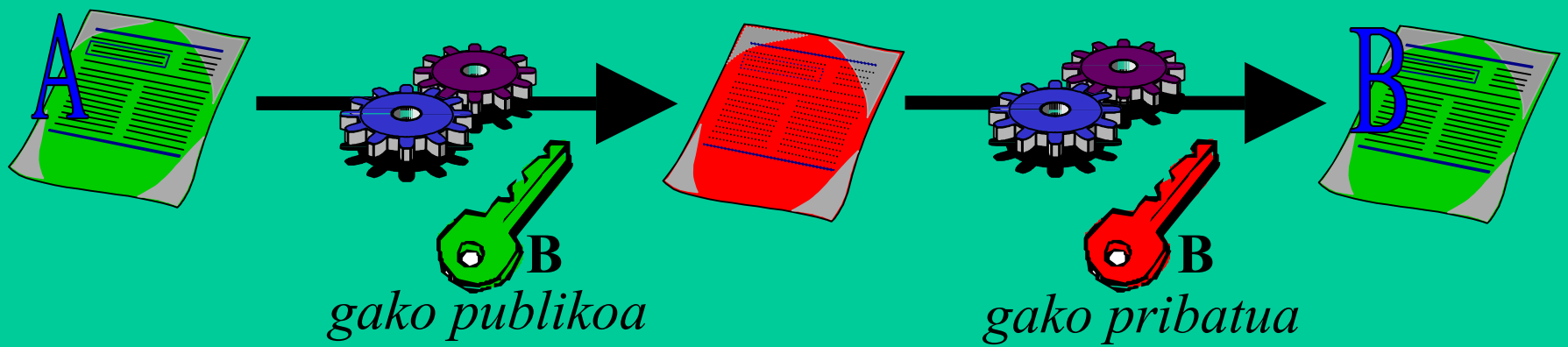
- kriptograma hausteko **prezioa** informazioaren balioa baino handiagoa izatea.
- kriptograma hausteko beharrezko **denbora** informazioaren balioa baino handiagoa izatea.

ALGORITMO MOETAK

Gako simetrikoak



Gako asimetrikoak



ALGORITMO MOETAK

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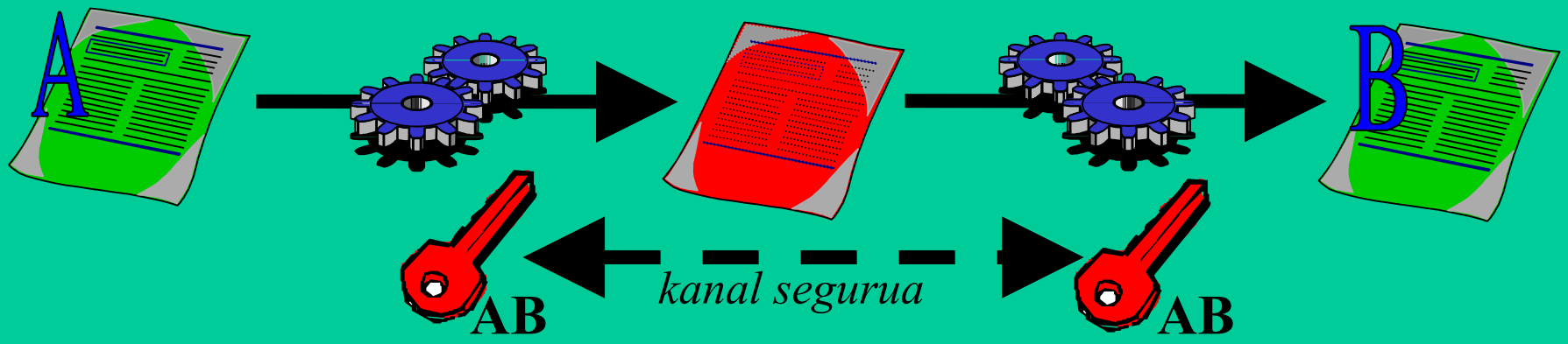

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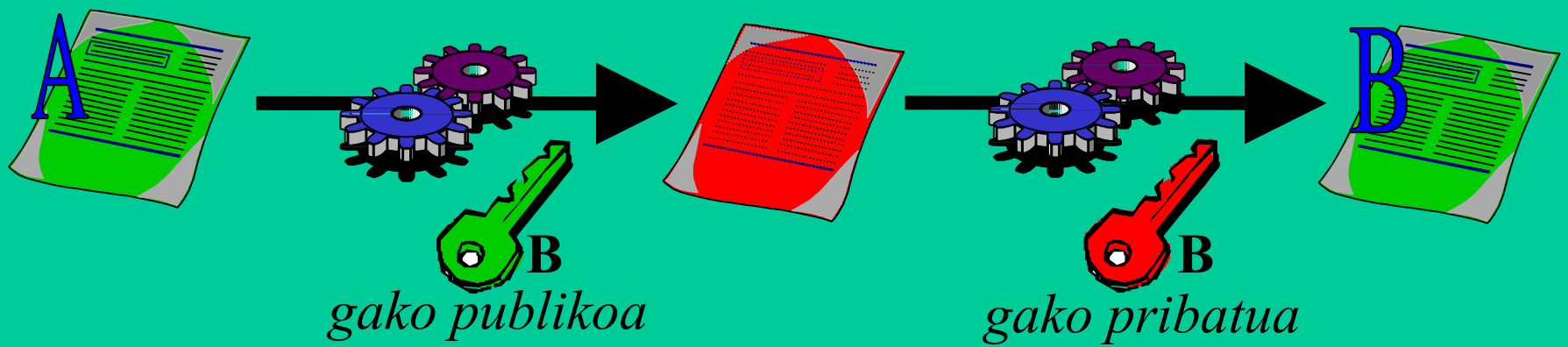
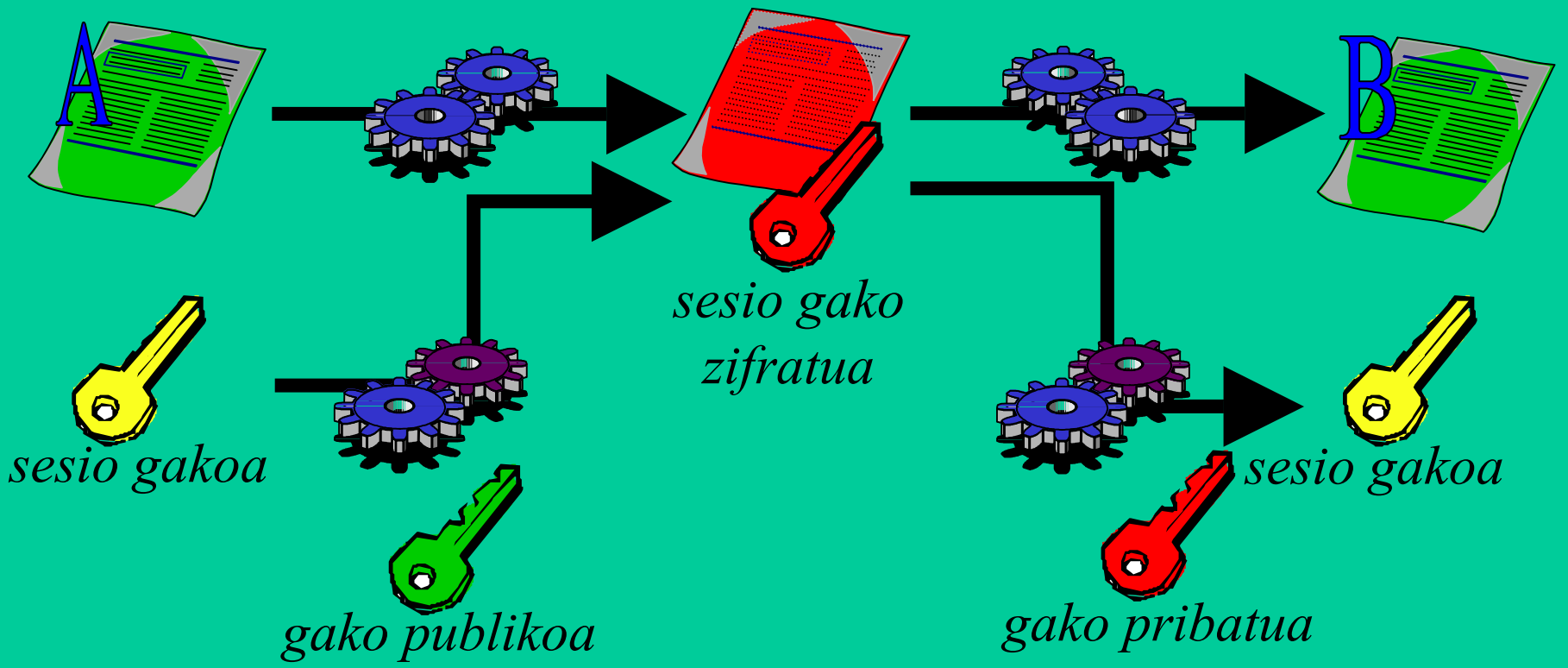


SISTEMA HIBRIDOAK

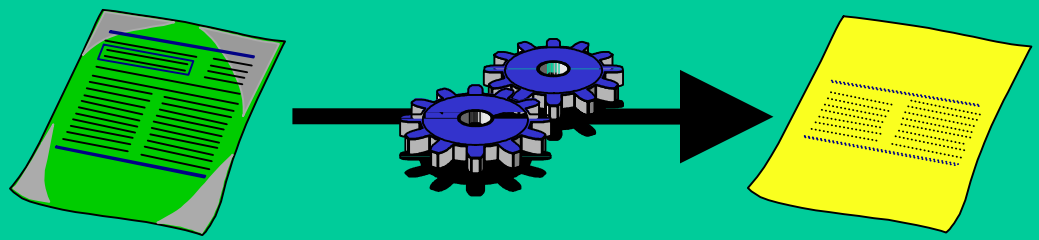
Gako simetriko + asimetrikoak



SAKABANATZE FUNTZIOAK

Sakabanatze funtzioa (hash)

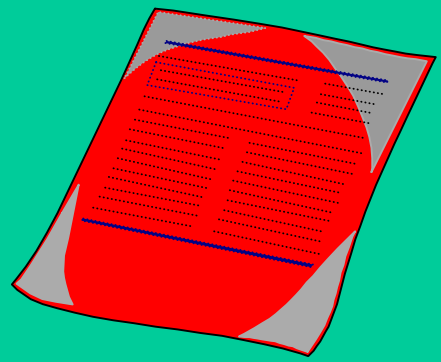
laburpen kriptografikoa



- algoritmo publikoa
- itzulezina
- tamaina finkoa

KRIPTOGRAFIAREN APLIKAZIOAK

Konfidentzialtasuna



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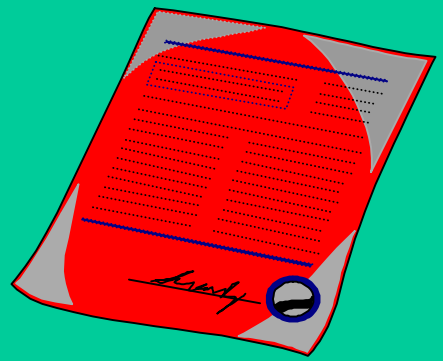
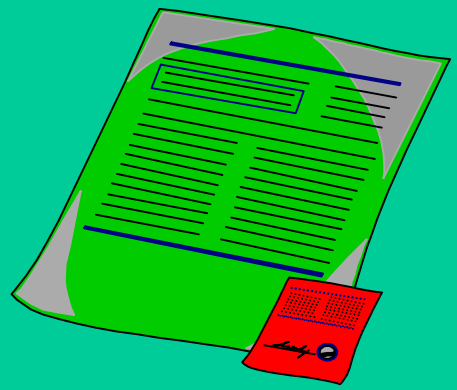
Kautotzea



Informazio iturria egiazta daiteke

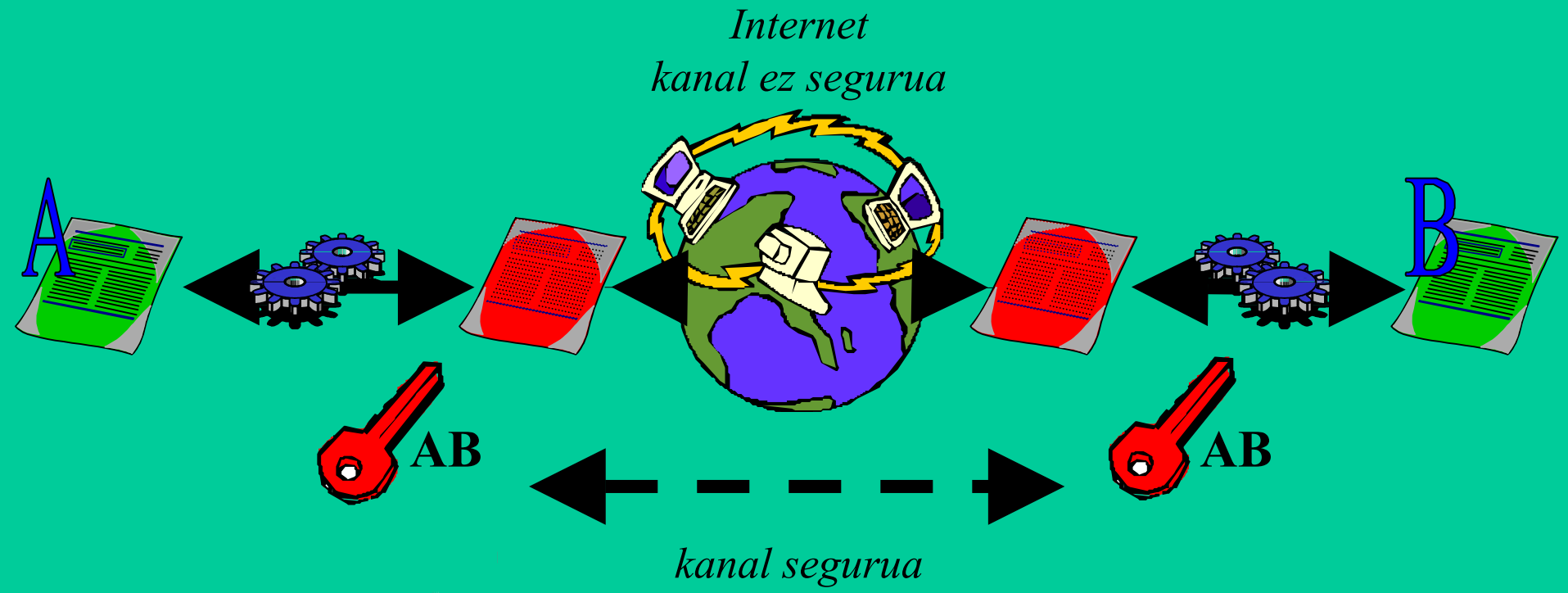
Osotasuna



Datuak bere osotasunean daudela ziurta daiteke

KONFIDENTZIALTASUNA

Kriptografia simetrikoa



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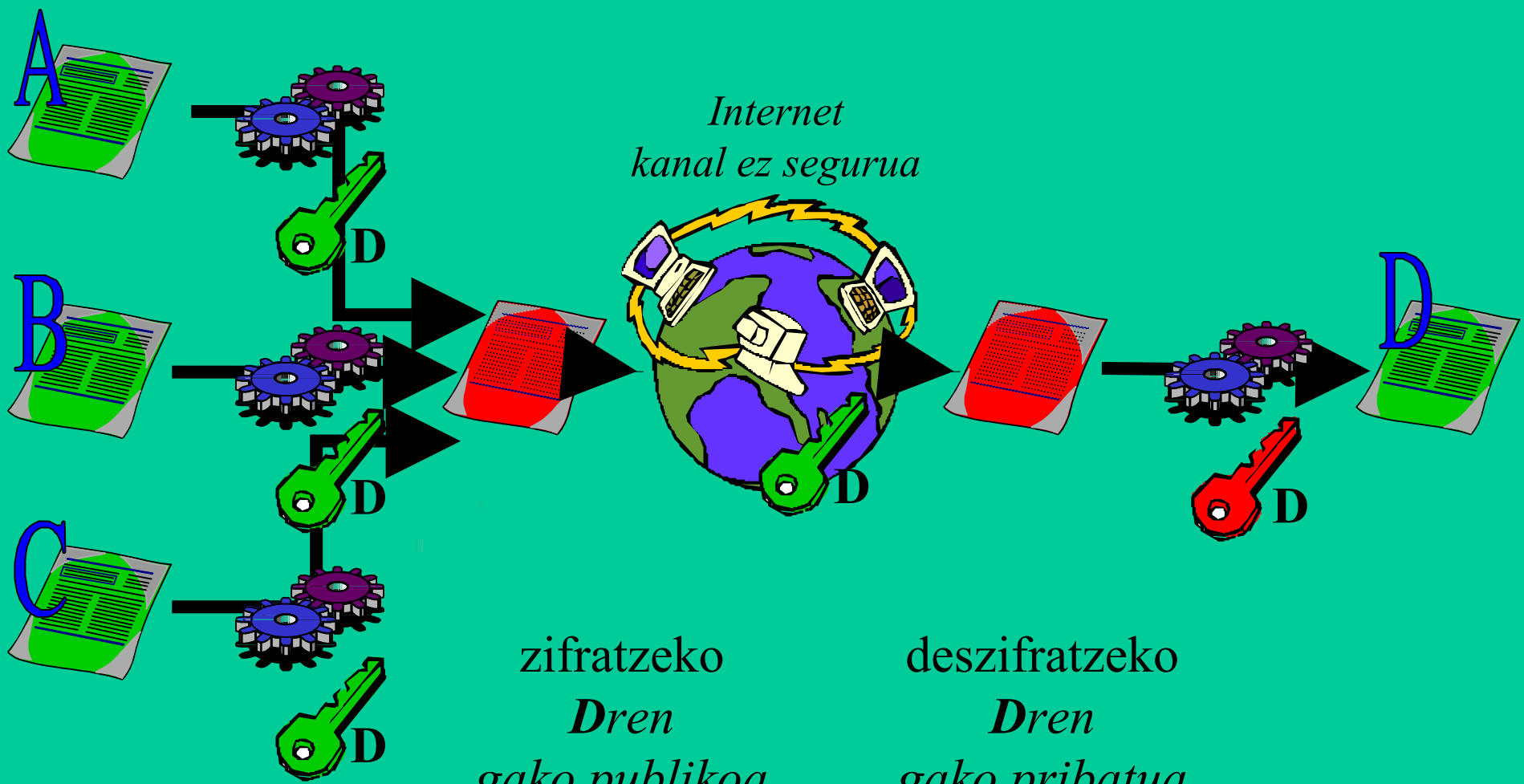
Kriptografia asimetrikoa



zifratzeko
***D*ren**
gako publikoa

deszifratzeko
***D*ren**
gako pribatua

KAUTOTZEA

Kriptografia asimetrikoa

deszifratzeko
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OSOTASUNA

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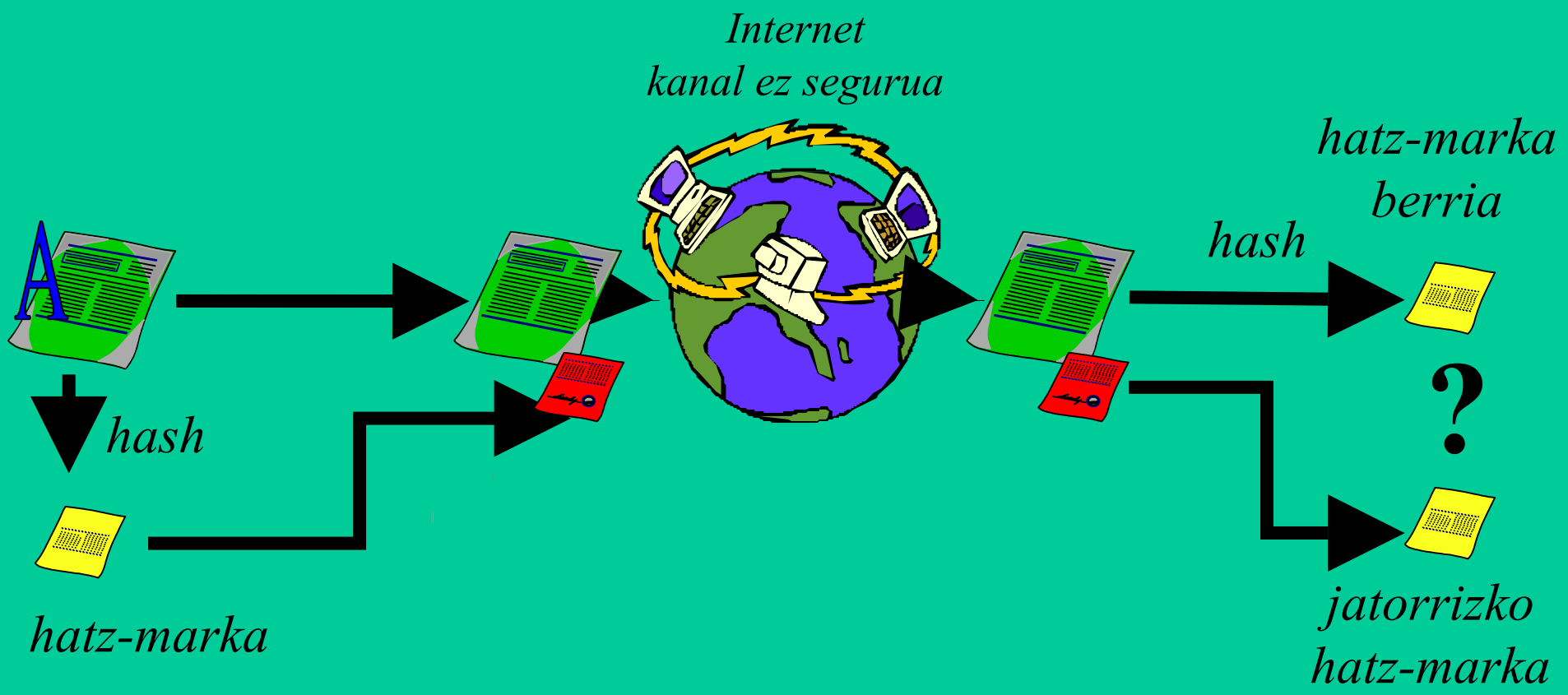

SINADURA DIGITALA

Kriptografia asimetrikoa + sakabanatze funtzioak