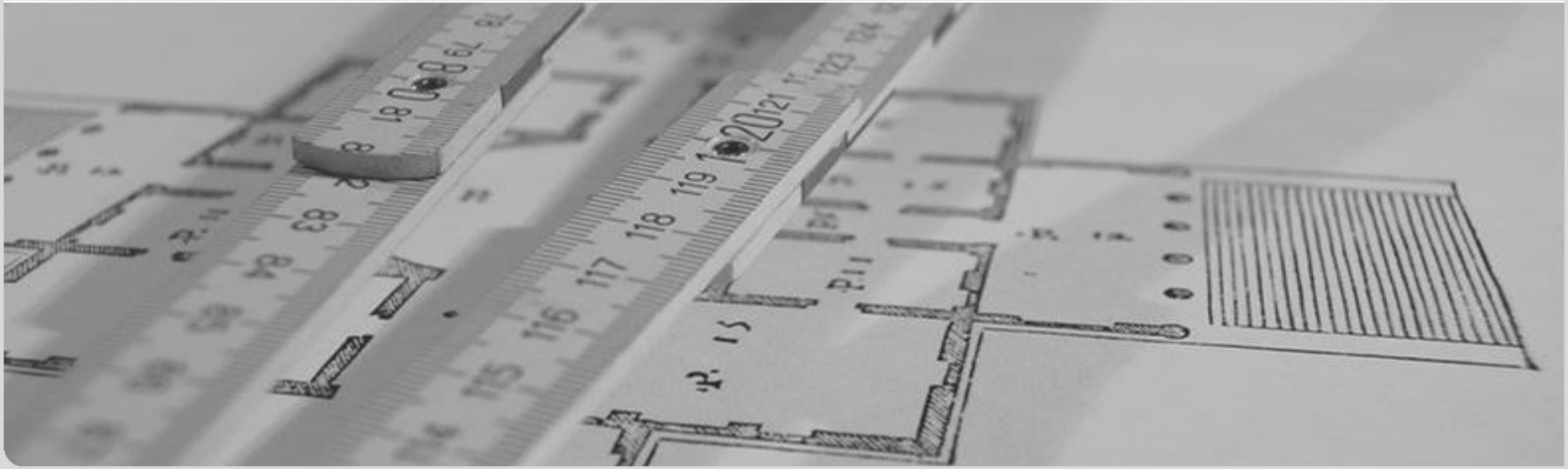
Karlsruher Institut für Technologie

Broadcast Encryption

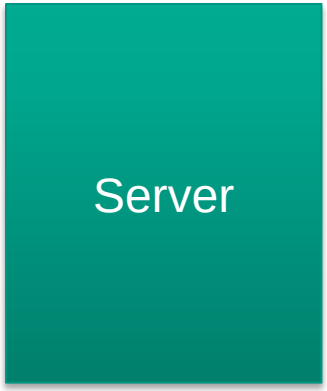
18.03.2013

PSE 2012/13

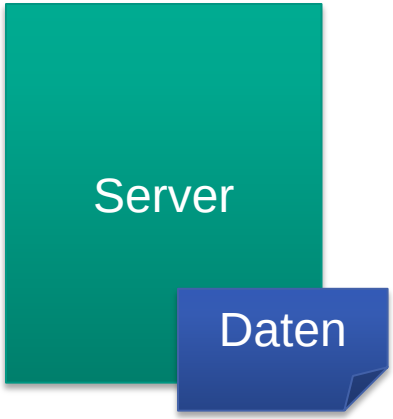


Mohammed Abu Jayyab, Niklas Baumstark, Tobias Gräf, Amrei Loose, Christoph Michel

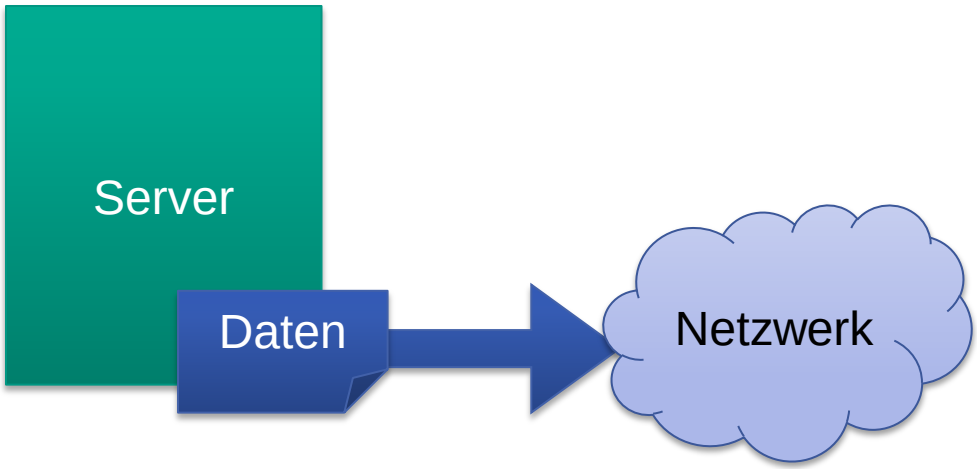
Broadcast-Verschlüsselung



Broadcast-Verschlüsselung



Broadcast-Verschlüsselung



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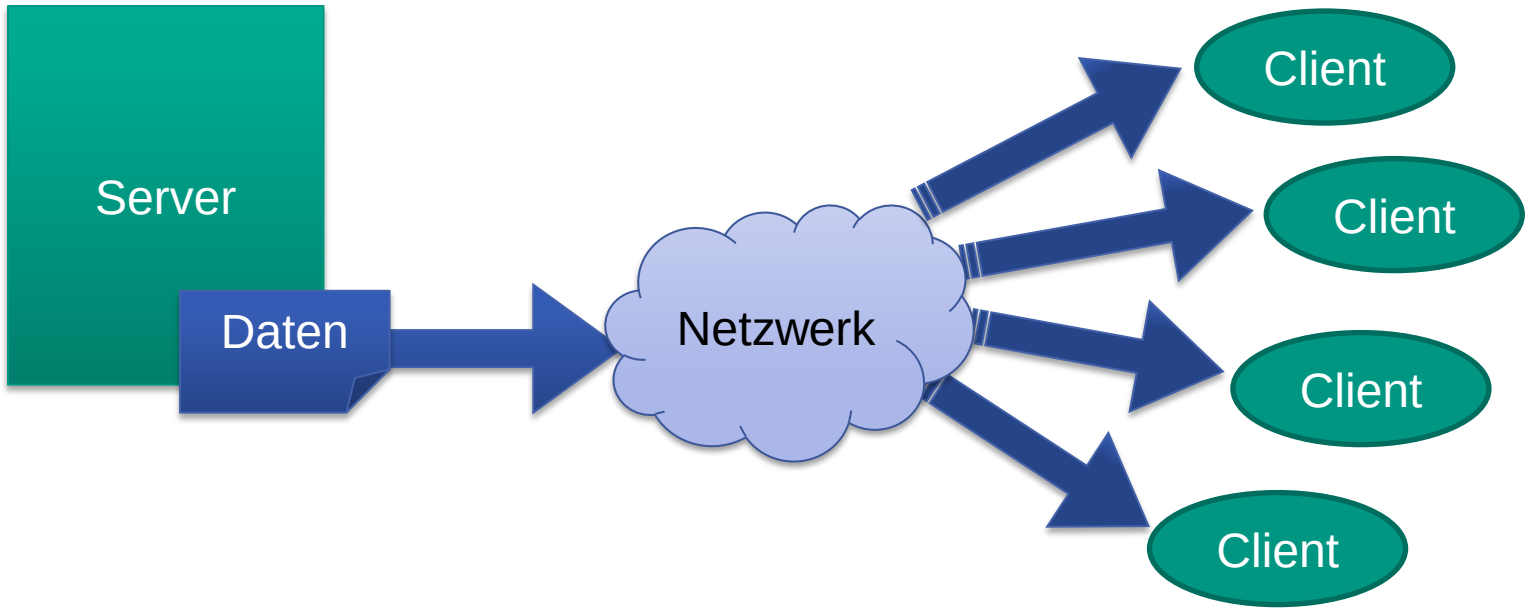

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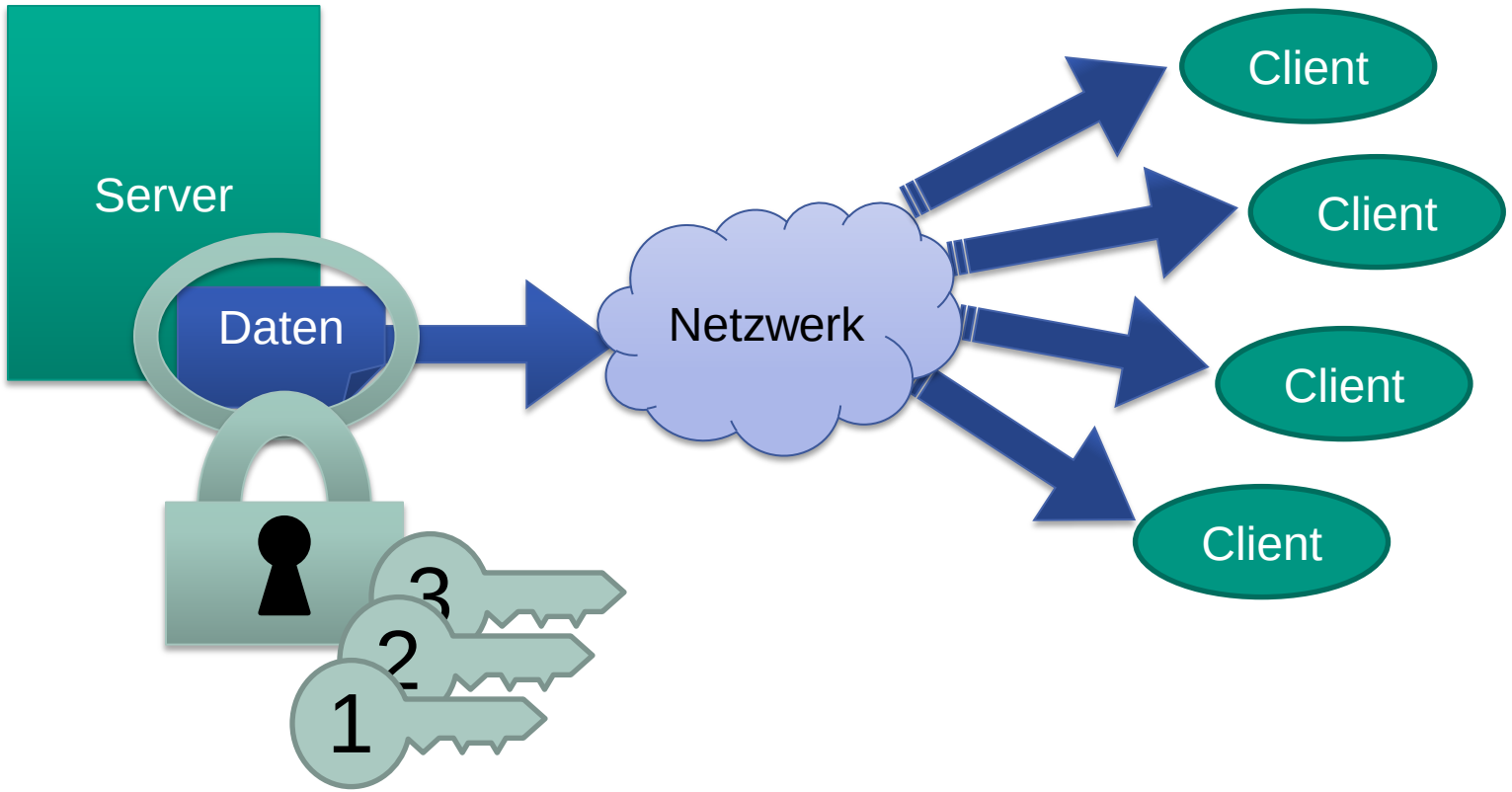

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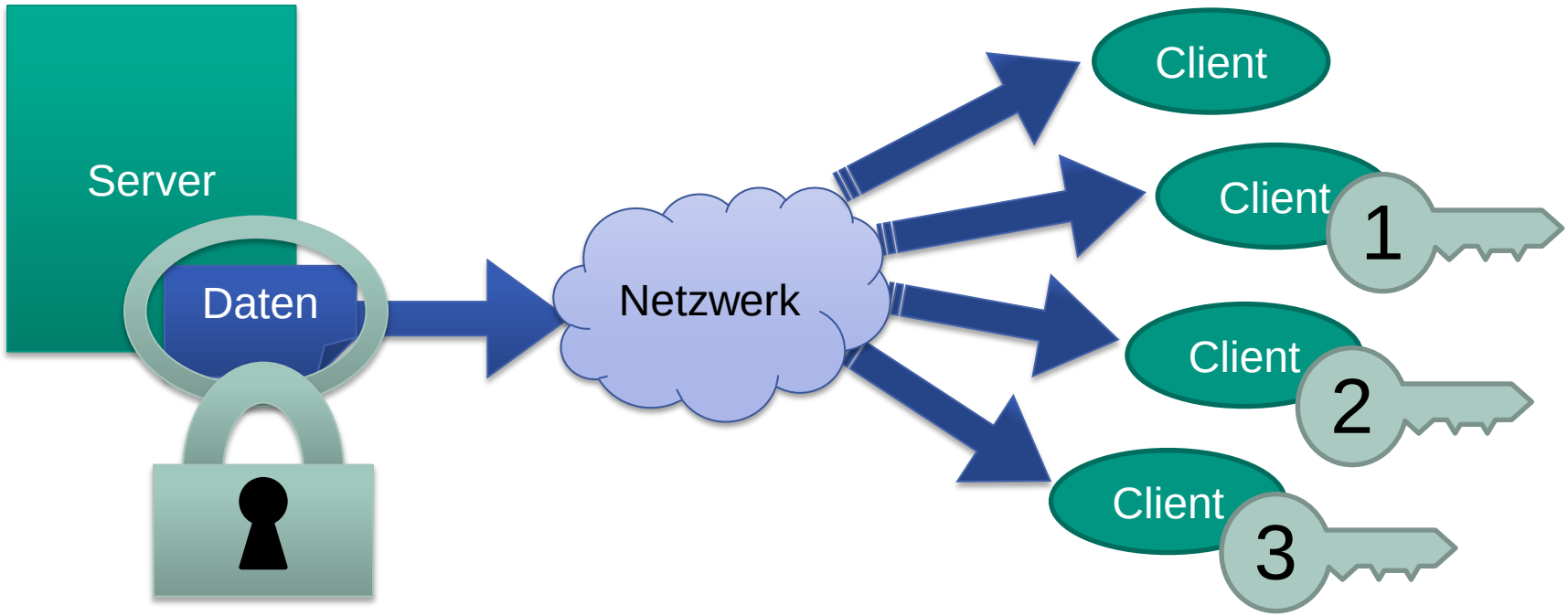

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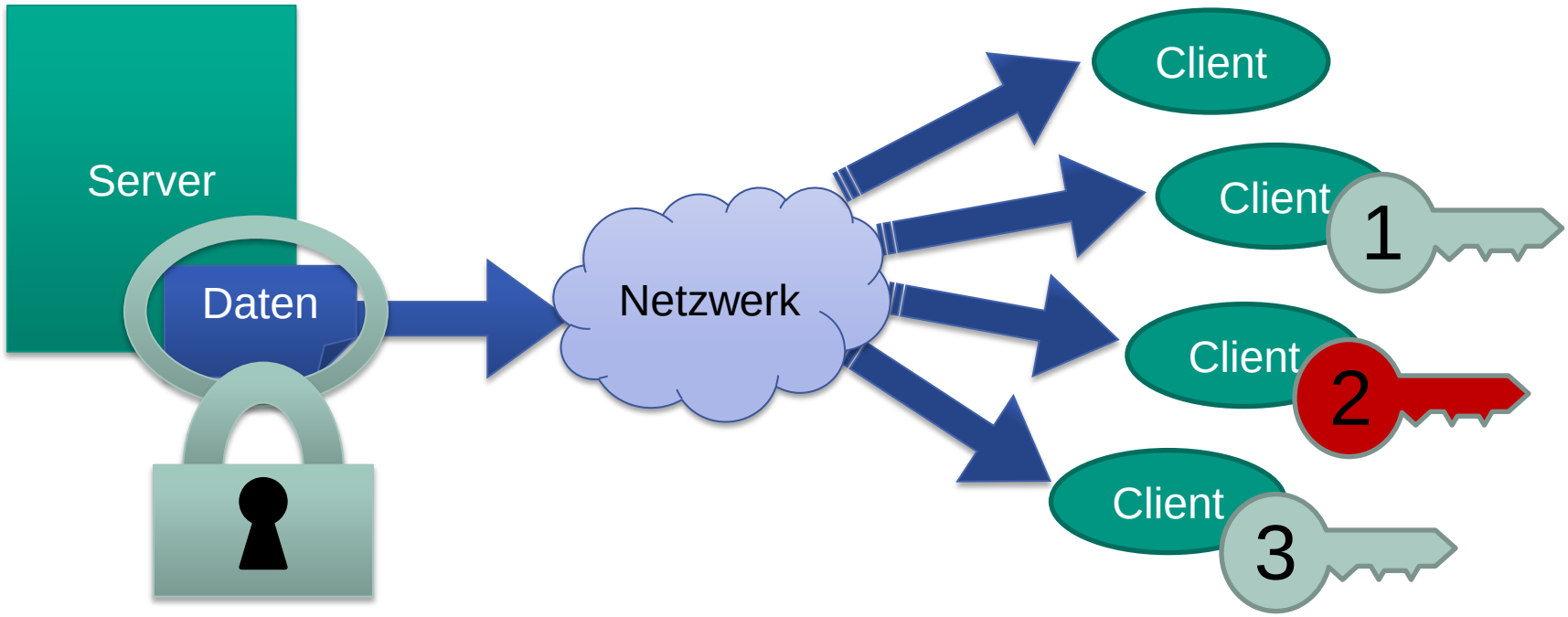
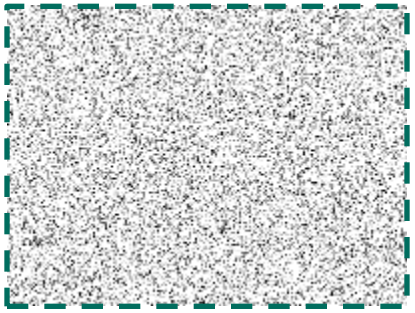
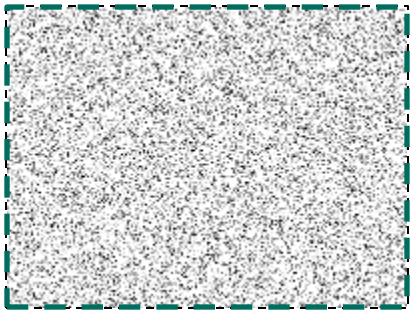
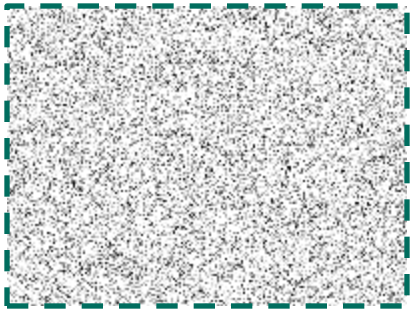
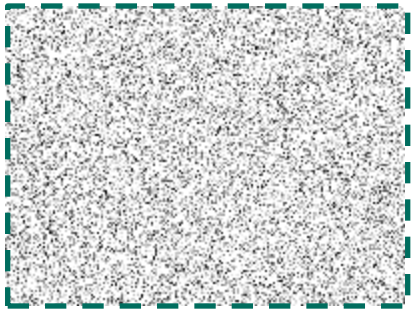


Shamirs-Secret-Sharing









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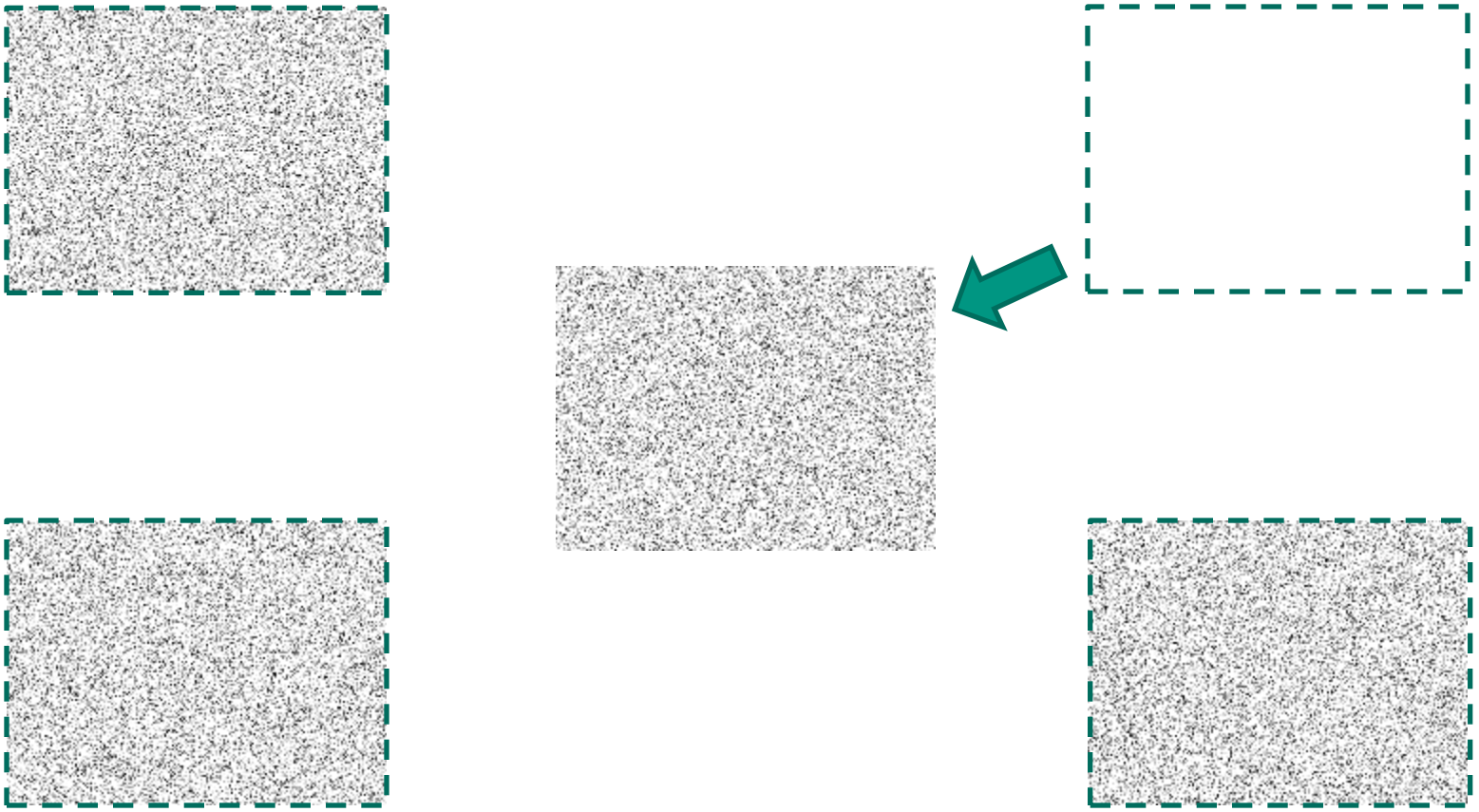

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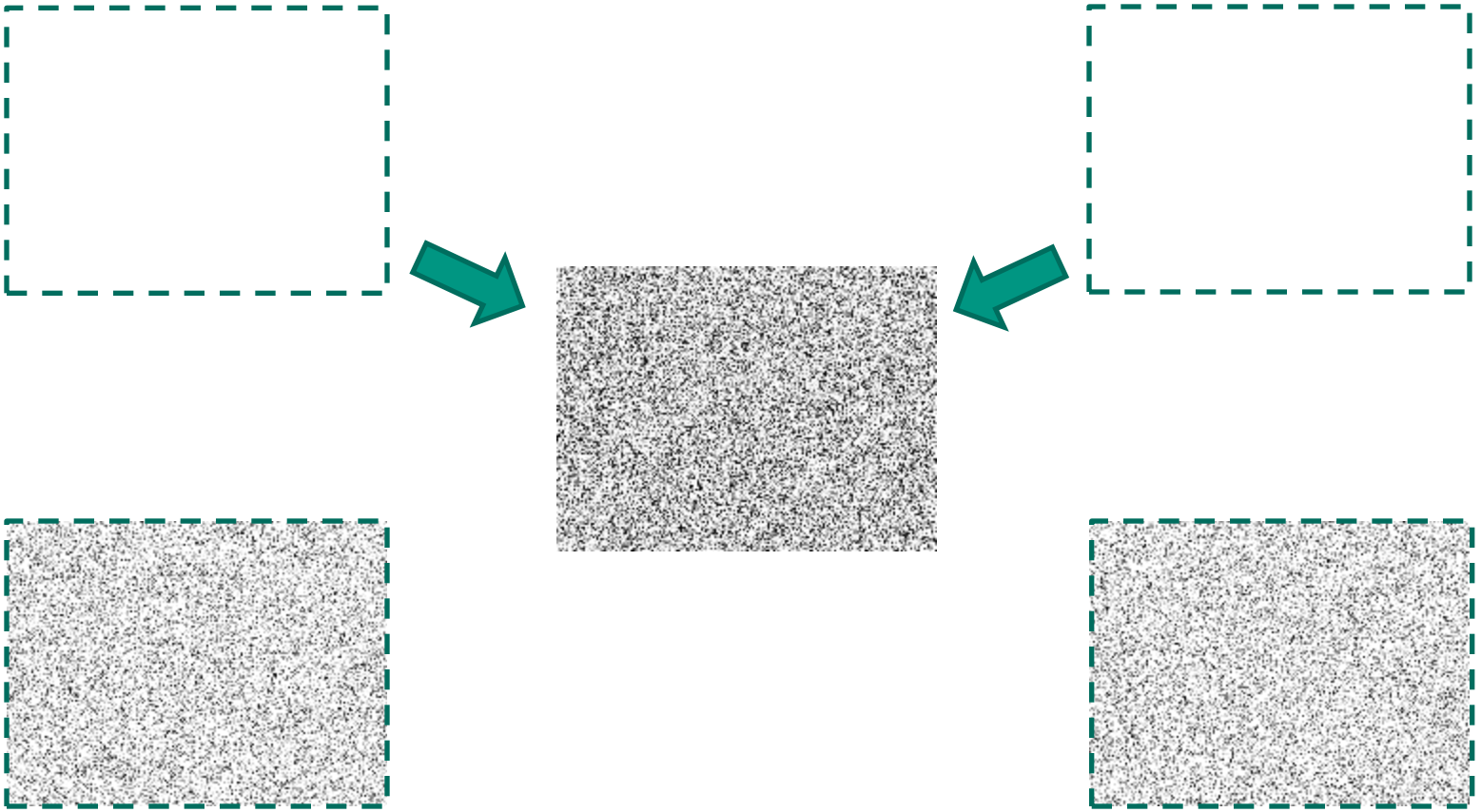

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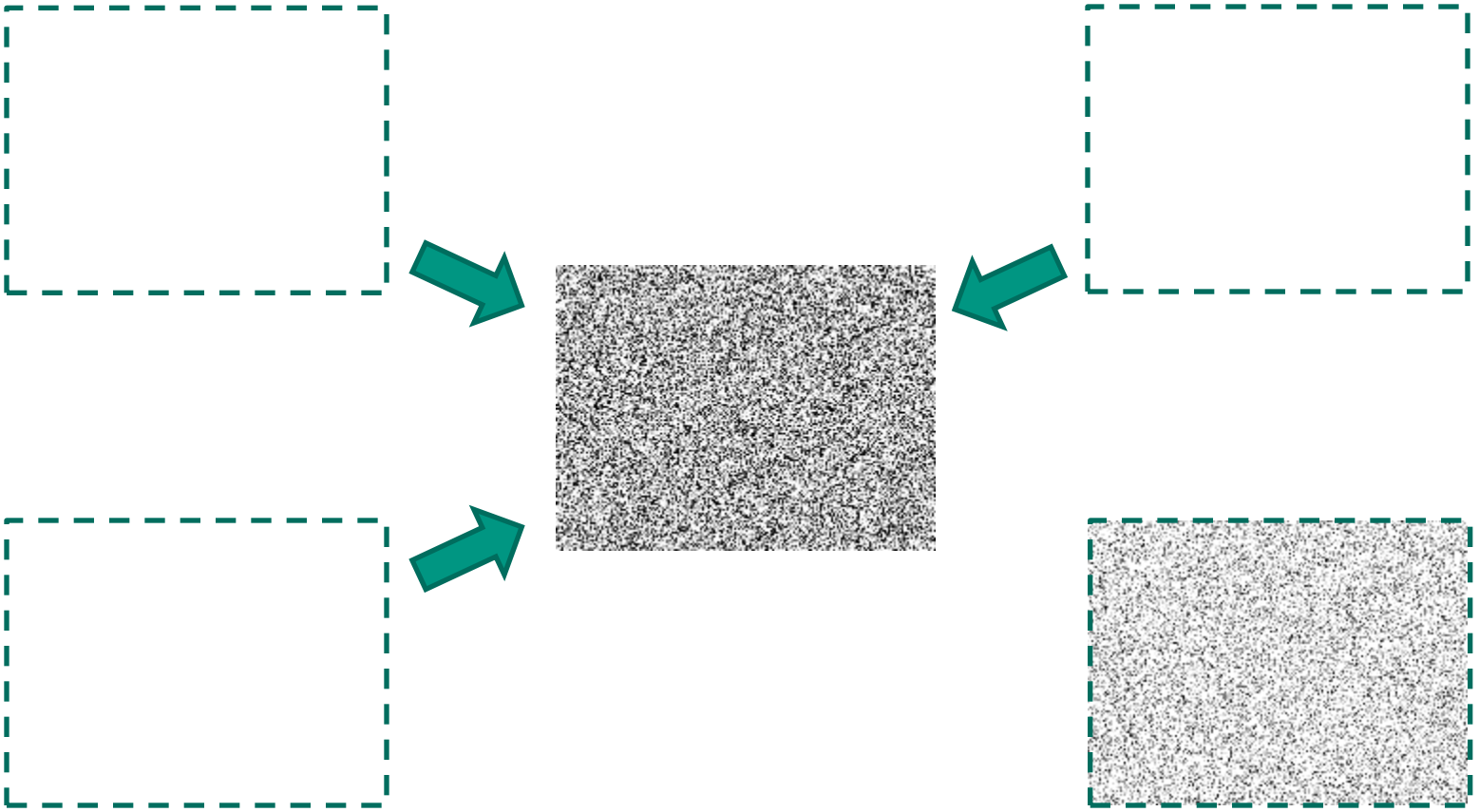
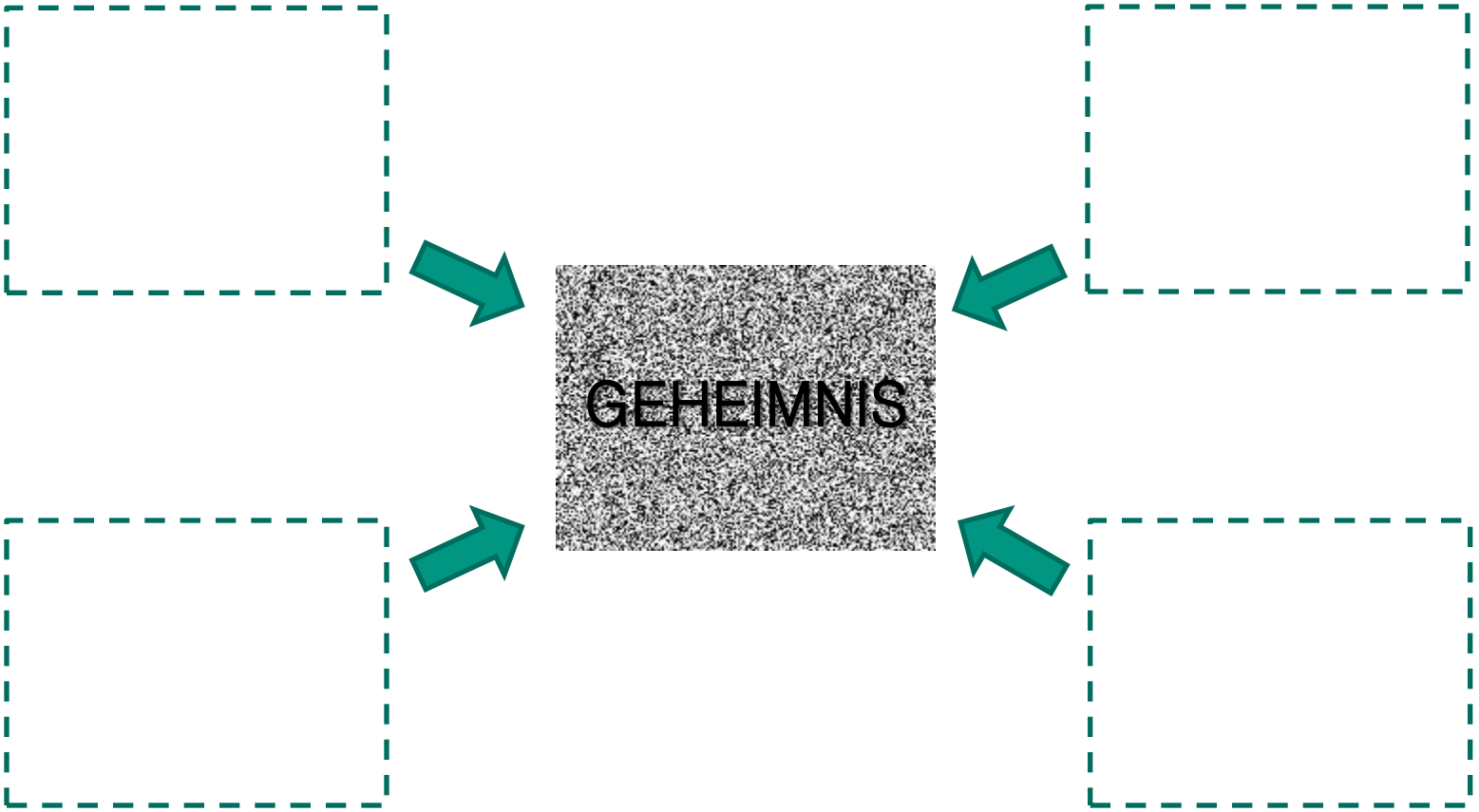
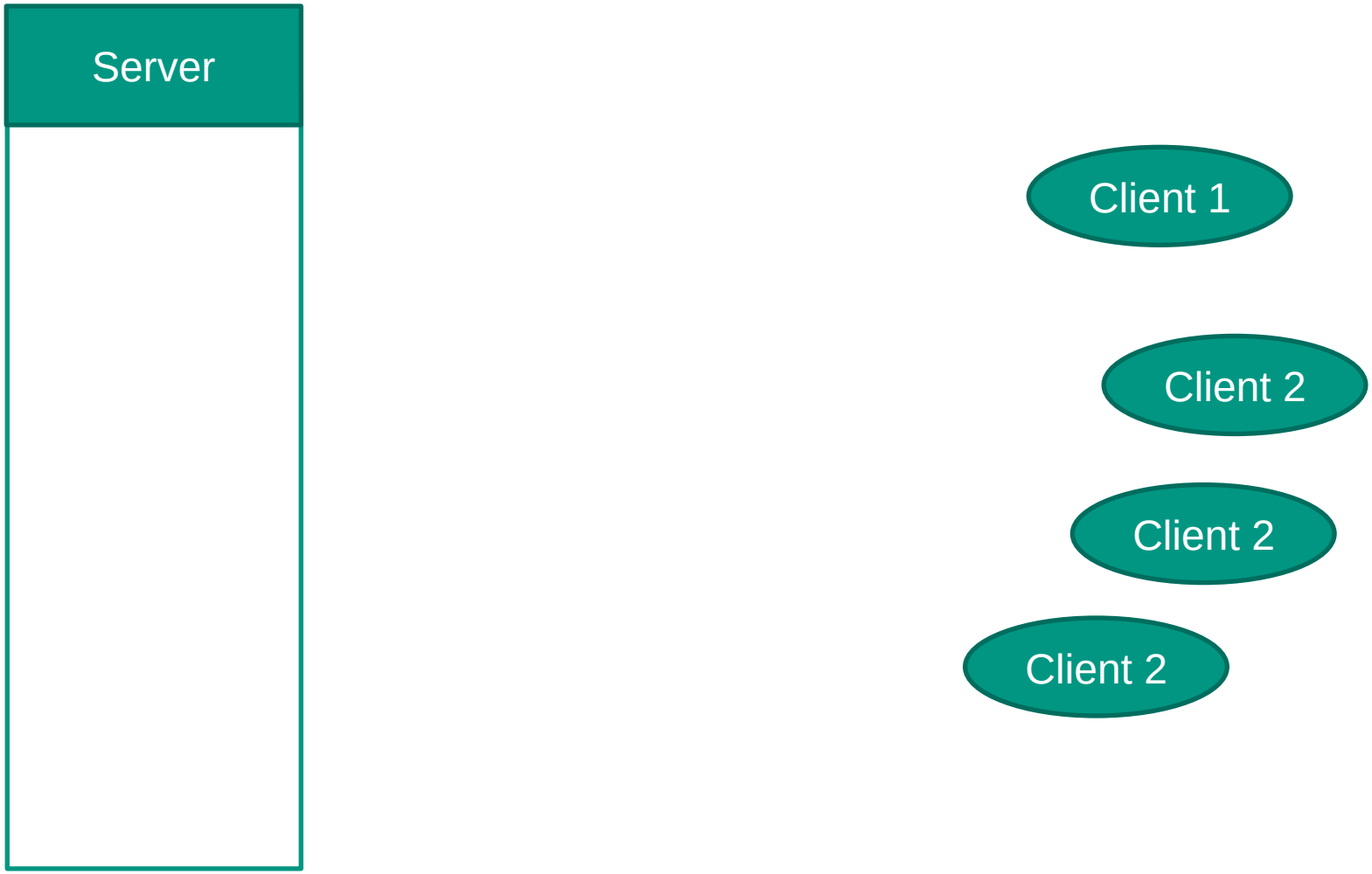


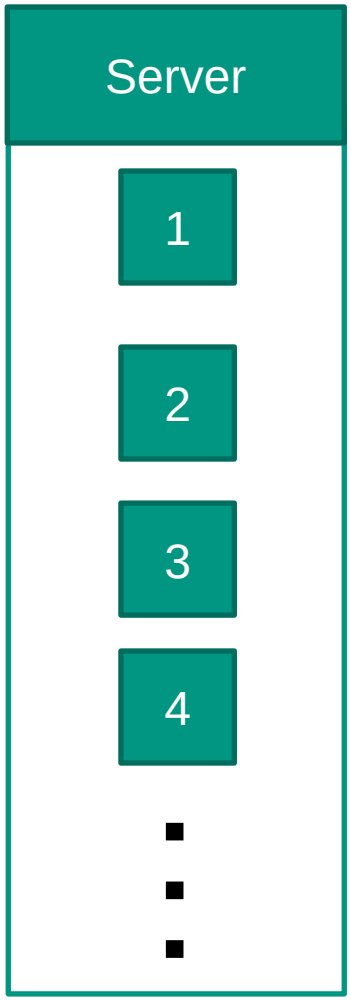
Shamirs-Secret-Sharing

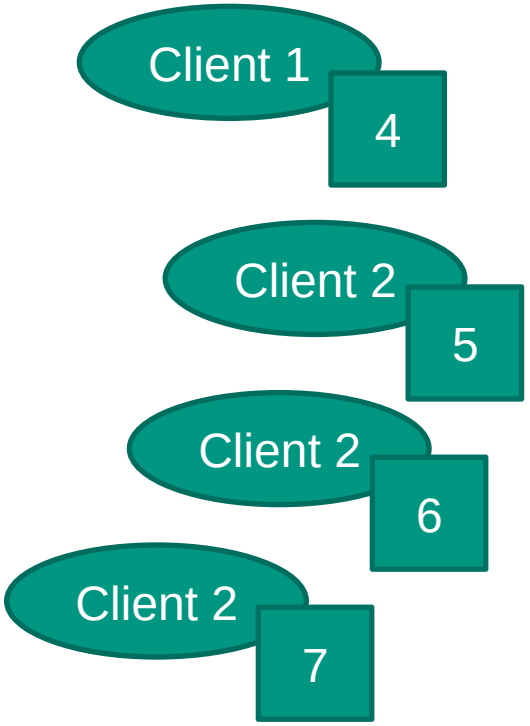


Naor-Pinkas-Revoke-Scheme



Naor-Pinkas-Revoke-Scheme





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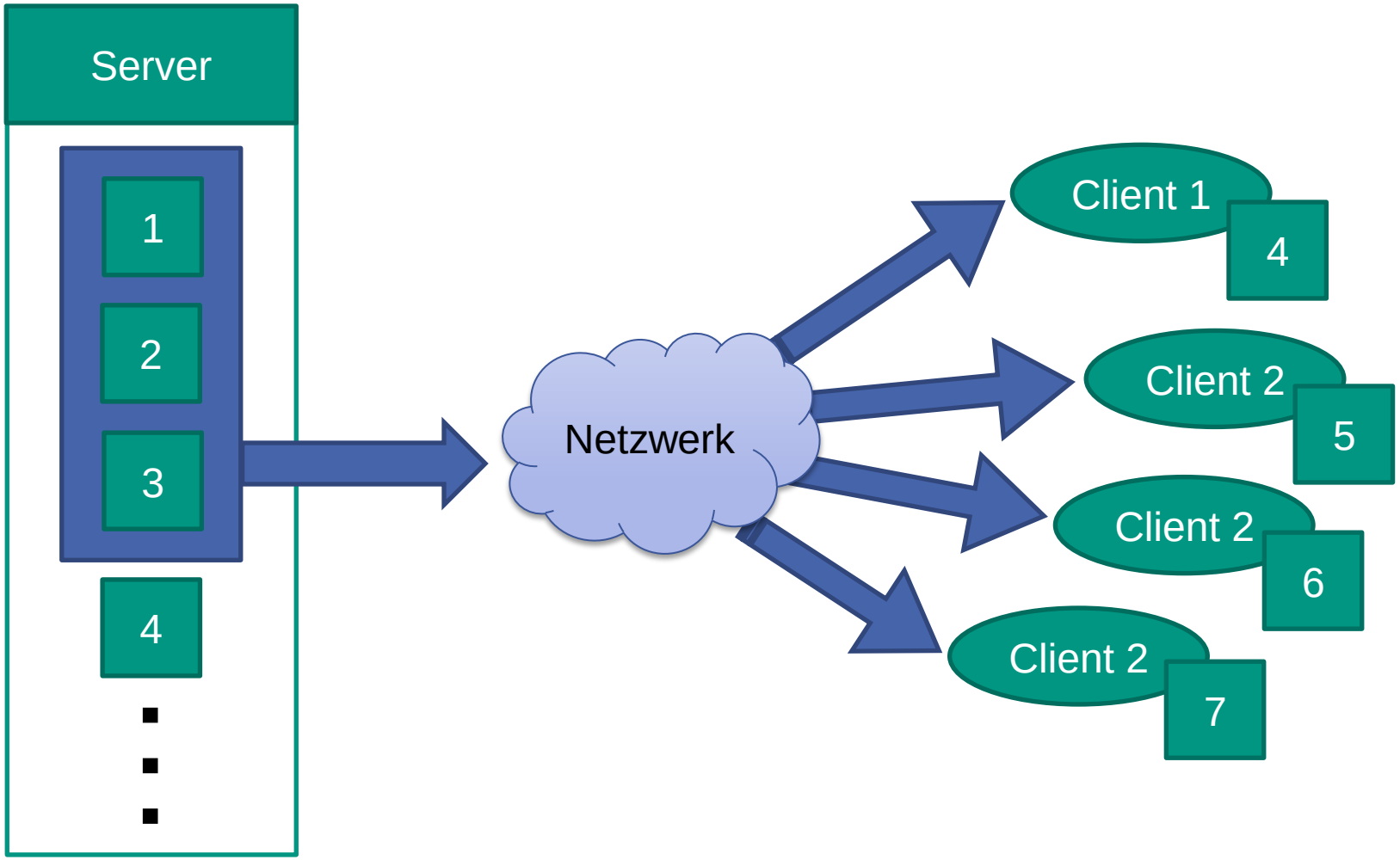

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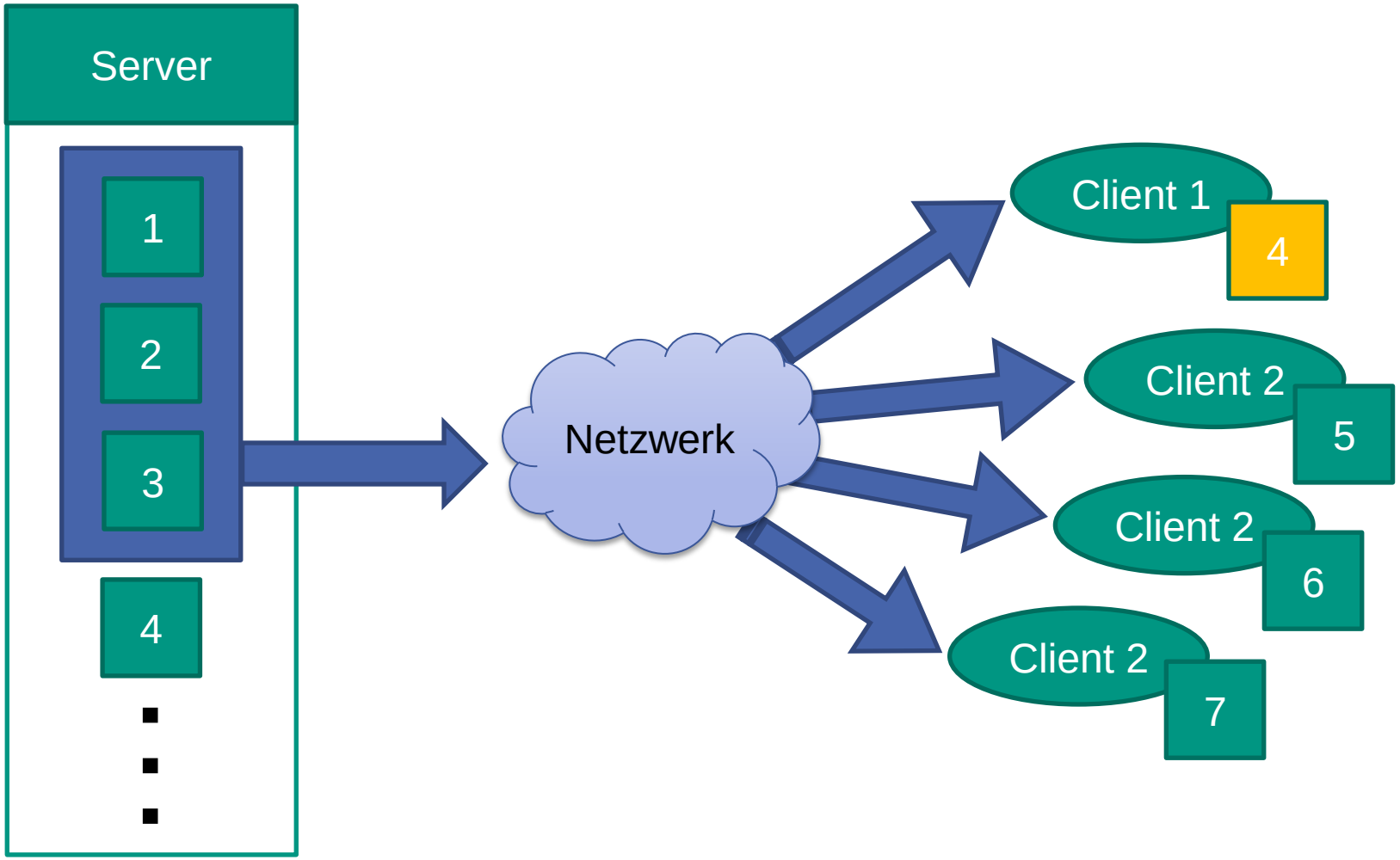
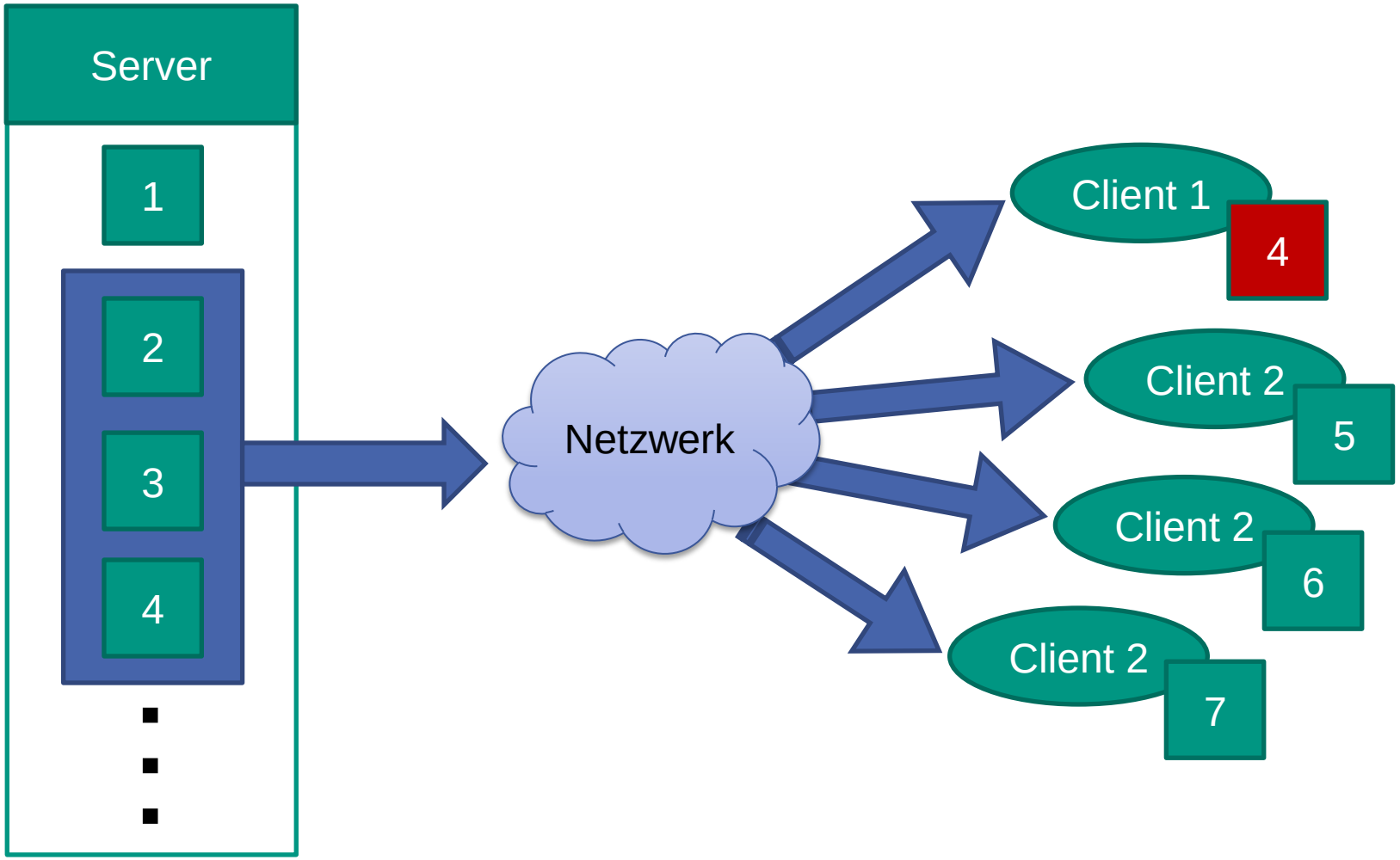


Naor-Pinkas-Revoke-Scheme



Unser Projekt

- Broadcast-Verschlüsselung in der Praxis ausprobieren!
- Entwickeln eines Produkts
  - Anbieter will Inhalte durch Server verbreiten
  - Rechenstarke Smartphones verbreitet: Android!
  - Soll für Benutzer möglichst einfach sein
- Entstanden ist: **CryptoCast**

  → Client-Server-Kombination für Broadcast mit Verschlüsselung

Technisches

- Server
  - Java und C++
  - Konsolenanwendung
    - Benutzerverwaltung
    - Verschlüsselung
    - Senden beliebiger Datenströme
- Client
  - Android ab 2.3
  - Empfangen
  - Entschlüsseln
  - Wiedergeben der Inhalte (bei uns: MP3)

Produktvorführung