

# Combinare Git e Blockchain

Per una Condivisione Affidabile delle Informazioni



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# II Problema

- **Condividere informazioni**
  - qualsiasi formato
  - modificabili nel tempo
    - creazione, cancellazione, aggiornamento
  - organizzate in cartelle
  - con **controllo delle versioni**
  - in modo **affidabile**
    - protezione di integrità e autenticità
    - protezione contro attacchi “retrospettivi”
    - verificabilità dei contenuti delle versioni
  - in modo **economico**
  - in modo **compatibile** ai sistema informativi dei soggetti/entità coinvolte



# ?Possibile Soluzione?

## Servizi di Cloud Storage and Collaboration

### *\*Drive, \*Box, ...*

# Valutazione Servizi \*Drive, \*Box, ...

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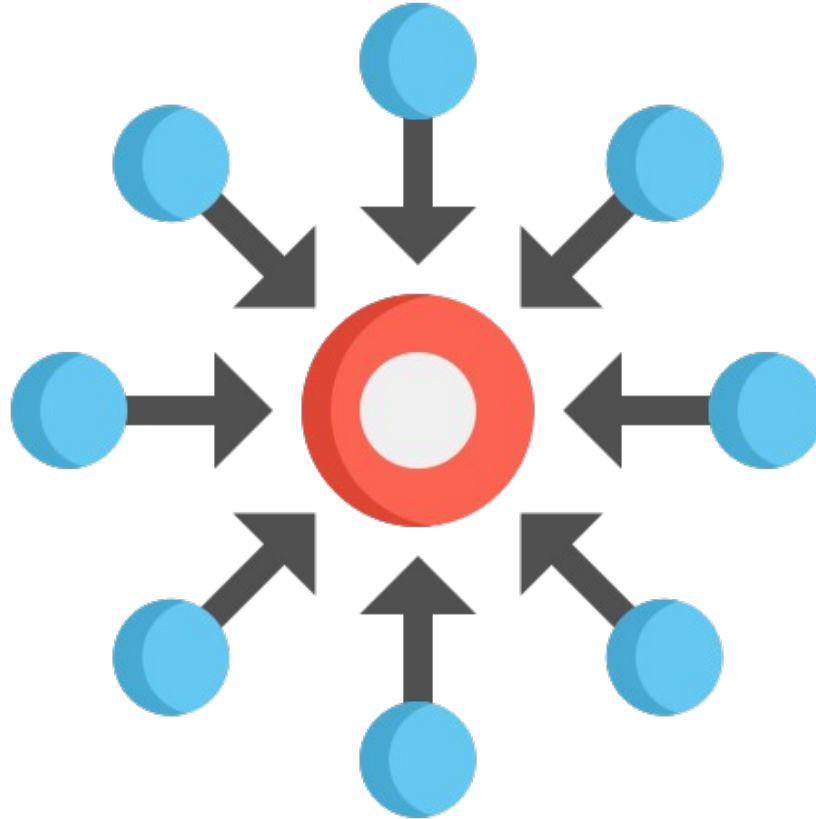
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**Soluzioni CENTRALIZZATE**

# Soluzioni Centralizzate

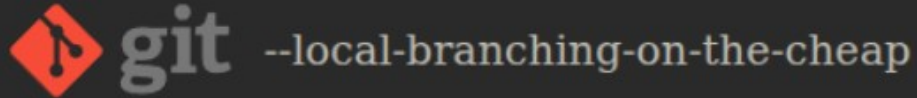


# ?Altre Soluzioni?

## Tecnologia *Git*



# git

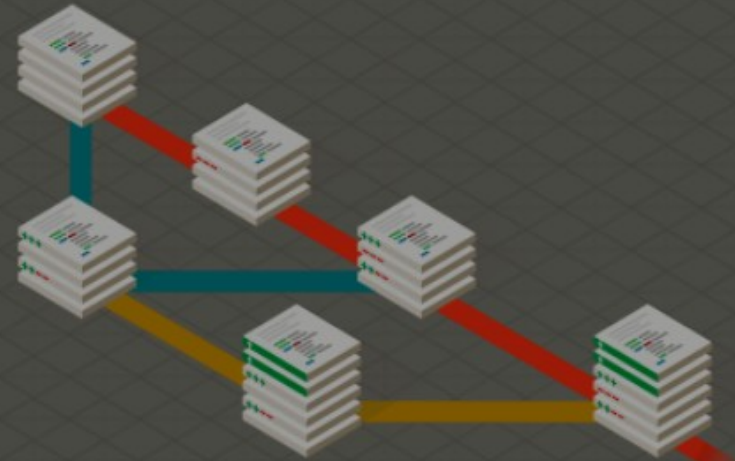


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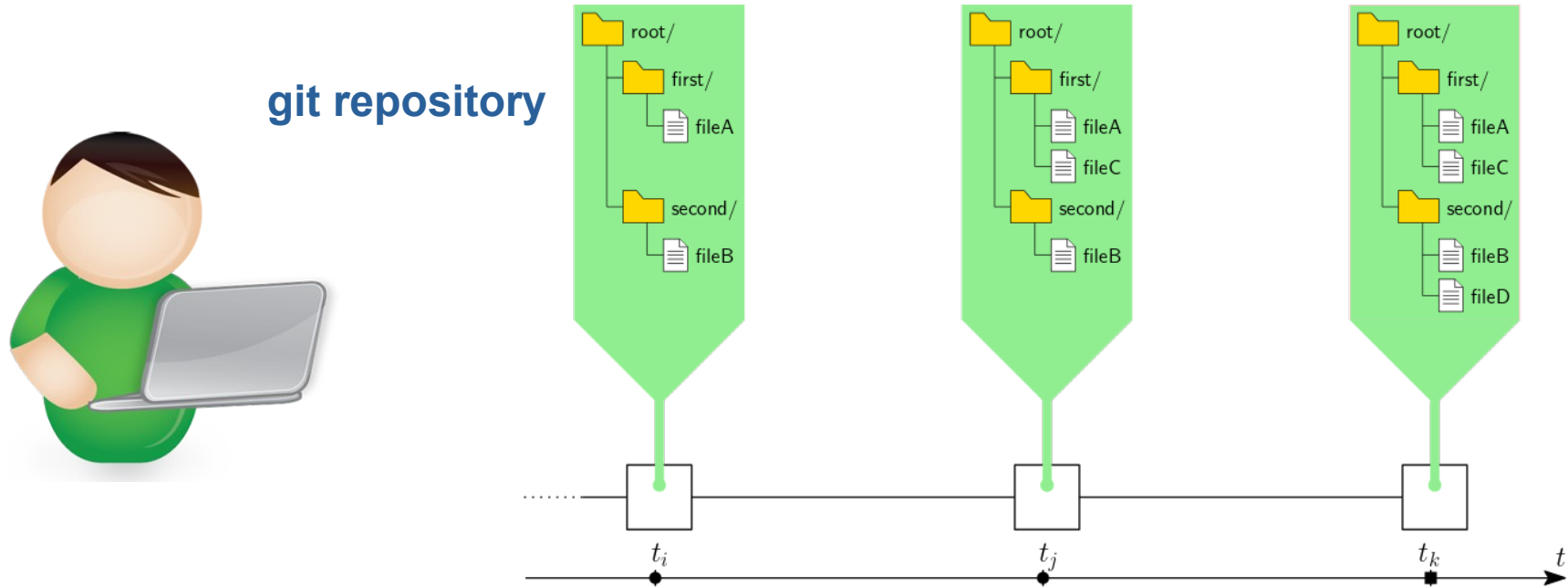
Git is a **free and open source** distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git is **lightning fast** and has a huge ecosystem of **GUIs**, **hosting services**, and **command-line tools**.



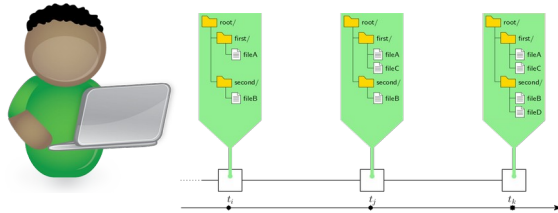


# git: singolo utente

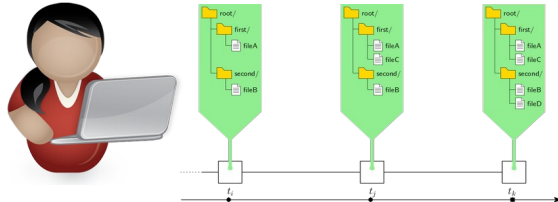


# git: team/ gruppo utenti $\Rightarrow$ git server

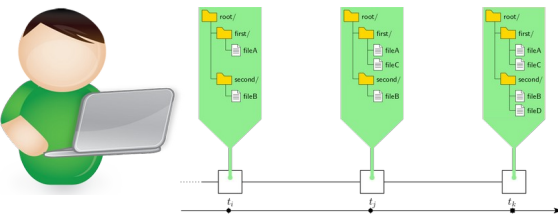
git client



git client



git client



git protocol








git server



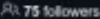

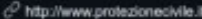

# git: protocollo distribuito






- ogni client ha una intera copia dei propri repository
- ogni copia è indipendente
- non presuppone esistenza di un **server centrale**
  - senza il quale sarebbe impedito il corretto funzionamento
  - i server hanno lo scopo di mettere in comunicazione i client
- piattaforme centralizzate come GitHub non impediscono
  - l'utilizzo locale delle repository
  - il trasferimento in altri server

# GitHub



 Platform ▾ Solutions ▾ Resources ▾ Open Source ▾ Enterprise ▾ Pricing



Search or jump to...    

**Presidenza del Consiglio dei Ministri - Dipartimento della Protezione Civile**  
    


 Overview  Repositories **24**  Projects  Packages  People




**Pinned**


 **UKR-2022**   
Dati emergenza Ucraina 2022 / Ukraine 2022 Emergency Data  
☆ 8 🍴 1


 **COVID-19**   
COVID-19 Italia - Monitoraggio situazione  
☆ 3.8k 🍴 2.2k




**People**  
This organization has no public members. You must be a member to see who's a part of this organization.

 **Repositories**

Find a repository...   

**DPC-Bollettini-Criticita-Idrogeologica-Idraulica**   
Bollettini di Criticità Idrogeologica e Idraulica Nazionale  
☆ 17 🍴 6 🔄 7 📄 1 Updated 7 hours ago

**DPC-Bollettini-Vigilanza-Meteorologica**   
Bollettini di Vigilanza Meteorologica Nazionale  
☆ 8 🍴 3 🔄 1 📄 0 Updated 7 hours ago

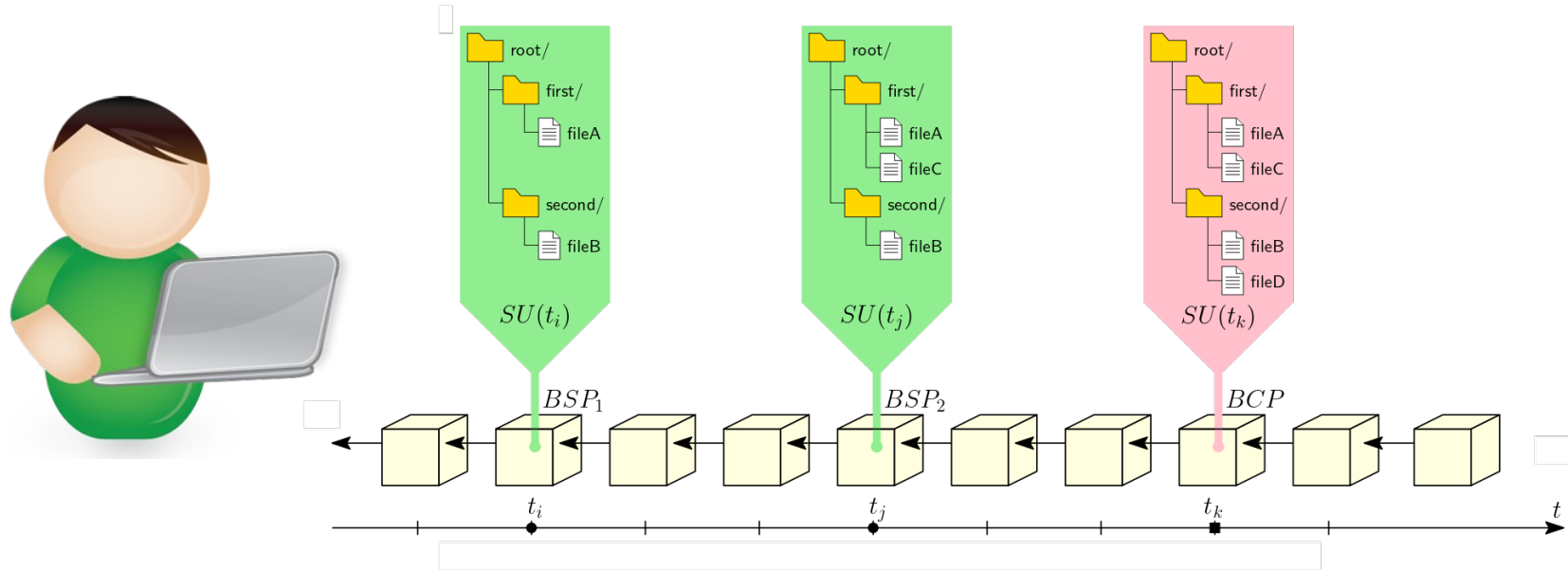
 Python  Java  HTML

# Valutazione Tecnologia Git

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# Combinare Git e Blockchain



# Combining Git and Blockchain for Trusted Information Sharing

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## Combining Git and Blockchain for Trusted Information Sharing

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**Abstract**

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