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**ABSTRACT**

Cloud computing provides many types of services such as software as a service (SaaS), platform as a service (PaaS), infrastructure as a service (IaaS), etc. This project mainly concentrates on infrastructure as a service in cloud computing. In that the client’s files are programmatically managed through a fixed set of simple system administration commands. Traditionally, if the user or client may delete their data, then it will not be recovered from their storage whatever the time or data. It is a main drawback of IaaS Cloud environment. The proposed system overcome the aforementioned problem by automatic rollback mechanism with the help of state capturing algorithm and check points for handles data for each user in Multi-cloud environment. When the user uses their services provided by cloud service providers such as resource management, memory management, etc. Using this system the user can recover the data, if they delete data by manually or by automatically by Artificial Intelligence (AI) planner. Rollback process is carried out by using manual check point or intermediate check point. Check point process is analyzing the user handing data whenever they used and what type data is used. Through this one can roll back their data whether it is deleted by manually or by automatically.

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| 4.1 | Architecture of the proposed system | 20 |
| 4.2  4.3.1 | Data Flow Diagram  Sequence Diagram  **LIST OF ABBREVIATIONS**   |  |  | | --- | --- | | AI  API | Artificial Intelligence  Application Programming Interface | | AWS  CSP  HCL  IaaS  PaaS  SaaS  TPA  UML | Amazon Web Services  Cloud Services Provider  Hardware Compatibility List  Infrastructure as a Service  Platform as a Service  Software as a Service  Third Party Auditor  Unified Modeling Language | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | | 21  23 |