



Endorsement Guideline Protocol Actuality Problem

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Abstract

Access control is a fundamental aspect of the security of any multi-user computing system, and is typically based on the specification and enforcement of an authorization policy. Such a policy identifies which interactions between users and resources are to be allowed by the system. Over the last twenty years, authorization policies have become more complex, not least because of the introduction of constraints, which further refine an authorization policy. A separation-of-duty constraint also known as the two man rule or four-eyes policy may, for example, require that no single user is authorized for some particularly sensitive group of resources. Such a constraint is typically used to prevent misuse of the system by a single user. The use of authorization policies and constraints, by design, limits which users may access resources. Nevertheless, the ability to perform one's duties requires access to particular resources, and overly prescriptive policies and constraints may mean that some resources are inaccessible. In short, tension may exist between authorization policies and operational demands: too lax a policy may suit organizational demands but lead to security violations; whereas too restrictive policy may compromise an organization's ability to meet its business objectives.

1. Introduction

Secure computing is a forward looking, highly sophisticated and secure distributed record keeping system which will help in the storage and analysis of large amount of documents database which can be

traced down to all workers. The system would include all the entry and exit records documents involved in the and hence accord transparent The model is based on consensus and hence all the documents will have to be validated and approved of, by all the members of the group before it



goes to contractor. The main purpose scope of the project is ONGC is the one of the leading corporation of india so the process is maintained highly secured only the authorised login only can access the documents and project .The concept of secure computing has taken the fancy of a lot of people and the technology became famous because of one of its most popular use cases.

Literature Survey

Pierre Berge, Jason Crompton [1] proposed The Authorization Policy Existency Problem. This paper is Access control is a fundamental aspect of the security of any multiuser computer system and is typically based on specifications and enforcement of an authorization policy. Such a policies identifies which interacts between user and resources are to be allowed by the system. Access control requirements have become increasing complex, leading to increasing sophisticated authorization policy often express in a term of constraints

Dr. U.M. Gokhale, D. Bajaj [2] proposed AES Algorithm for Encryption. Cryptography operation in wireless device which uses little memory and a low power processor causes system overhead thereby implementing security hardware dedicated to cryptography necessary now a days. Encryption is technique which convert data or information into code which is unreadable. In 2021, advance encryption standard is a symmetric block cipher that operated on 128 bit block as input and output data. The algorithm can encrypt as well as block using a secret key which has a key size of 256, 192 or 128 bits. AES is simplicity that is achieved by repeatedly combining substitution and permutation computation at different rounds.

Parasoon Raghav, Rajad Parashar [3] proposed Security Data in Cloud using AES algorithm. The quickly growing variety of wireless communication users has lead to increase in demand for security measures and device to guard user information transmitted over wireless channel. Two kind of cryptological system



developed for the symmetric and asymmetric cryptosystem, Symmetry cryptography likes AES, DES and asymmetric likes with a RSA uses completely different key for encoding and decoding, eliminating key exchange drawback. symmetric cryptography is more appropriate for the encoding of and outsized amount of information the AES algorithm can be symmetric block cypher that process data blocks of 128bit employing a cipher key of length 128bits

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System Design

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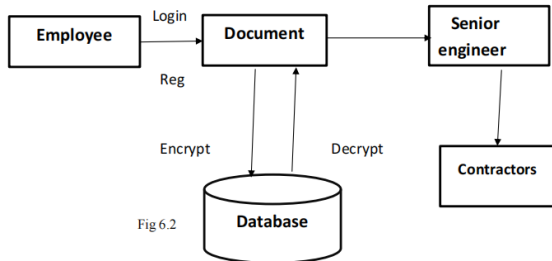
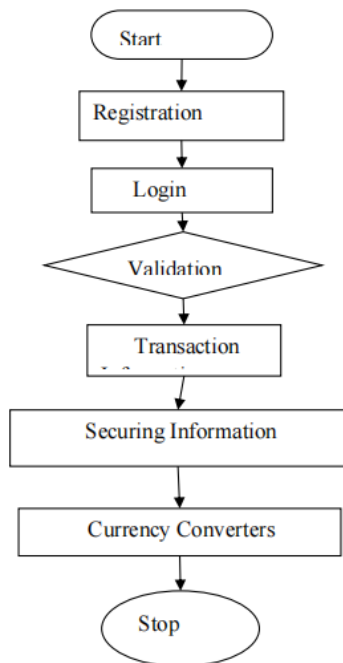


Fig 6.2

The client-side application is developed for three entities, namely admin, driver and passenger. The admin has complete control of the data flow between server and client.



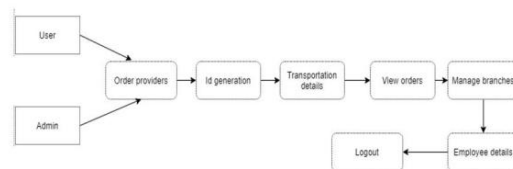
A data flow diagram is a graphical tool used to describe and analyze the movement of data through a system. These are the central tool and the basis

from which the other components are developed. These are known as the logical data flow diagrams. The physical data flow diagrams show the actual implements and movement of data between people, departments and workstations. Using two familiar notations Yourdon, Gane and Sarson notation develops the data flow diagrams.

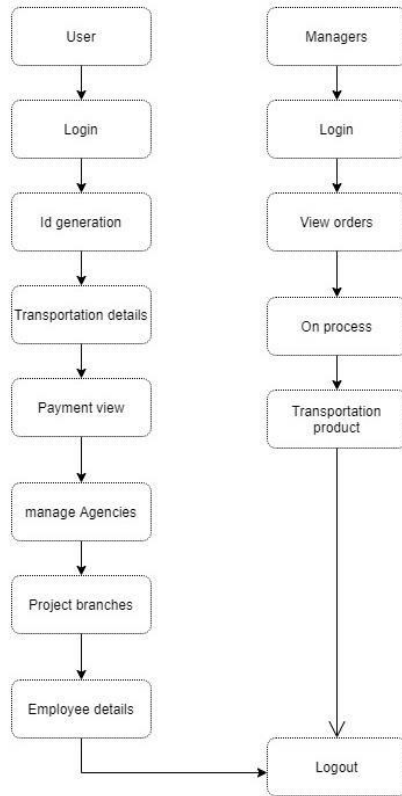
LEVEL 0



LEVEL 1



LEVEL 2



Implementation

- AES is based on symmetric algorithm and work with 128 bit keys.
- AES works only with 128 bit key i.e secret key should be less than 16 symbols.
- AES is able to encrypt anything which consists of bytes
- types of files does not matter.

symmetry key algorithm

```

1: void generate symmetric
key(byte [16]key)
2: {
3: byte row index,coloumn index;
4: byte shift count =get
shiftcount(key);
5:byte [ ]symmetry key =generate
primary key();
6: for (i=0;i<16,i++)
7:{
8:get properindex (key [i].outrow
index,outcoloumn index);
9:shift row (row index,shift count);
10: shift coloumn(coloumn
index,shift count);
11:swap (rowindex,coloumn index);
12:}
13:}
  
```



manage.py

```
import os
import sys
if __name__ == "__main__":
    os.environ.setdefault("DJANGO_SETTINGS_MODULE",
        "authorization_policy.settings")
    try:
        from django.core.management
    import execute_from_command_line
    except ImportError as exc:
        raise ImportError(
            "Couldn't import Django.
            Are you sure it's installed and
            available on your
            PYTHONPATH
            environment variable? Did you
            forget to activate a venv?
            Or is your virtual environment
            not activated?")
    from exc
    execute_from_command_line(sys.argv)
```

emailsettings.py

```
SET_EMAIL_USE_TLS=True
SET_EMAIL_HOST='smtp.gmail.com'
SET_EMAIL_HOST_USER='cloudauthenticate@gmail.com'
SET_EMAIL_HOST_PASSWORD='cloudauthenticate12'
SET_EMAIL_PORT=587
SET_EMAIL_BACKEND='django.core.mail.backends.smtp.EmailBackend'
SET_DEFAULT_FROM_EMAIL='cloudauthenticate@gmail.com'

wsgi.py
import os
from django.core.wsgi import
get_wsgi_application
os.environ.setdefault("DJANGO_SETTINGS_MODULE",
    "authorization_policy.settings")
application = get_wsgi_application()
```



Conclusion and Future References

Enhancement

In this paper we have introduced a general framework within which we can specify problems concerned with finding authorization relations (“policies”) that must satisfy certain kinds of constraints. We have shown that there exist FPT algorithms to solve the authorization policy existence problem when all constraints are user-independent and are bounded in an appropriate way. We have also shown that many constraints of practical interest are indeed user independent and bounded. Our prior work on implementing FPT algorithms for We believe there are many opportunities for future work, not least exploring what types of authorization constraints might be useful in practice and determining whether those constraints are user-independent and bounded.

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