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Web Conferencing Central using Cloud Computing

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Abstract- **Irrespective of the participant's location, the user will be able to join the scheduled conference remotely. In addition to the conference facility the system also gives the advantage of video presentation parallel to conference. Also the system allows the web chatting in the conference between the participants along with the multiple options of sending messages either to individual participant or visible to everyone. The system also allows the user to upload the documents and that can be used by the other users who logs into the portal. And the system provides the concept of white board which improves the conversation effect happening. The system provides the option for user to choose the mode of event to schedule private, public, paid or general discussions to take place. The system is hosted on a cloud environment which results in handling the resources dynamically. This helps the system to balance the load automatically by auto scaling whenever the load is increased or decreased depending on the people who join the conference. The user in order to use this system first logs into the portal by providing his credentials username and password through a web browser.**

Keywords- Conference, Video, Document, Event etc.

I. INTRODUCTION

A Cloud Computing is a general term used to describe a new class of network based computing that takes place over the Internet, basically a step on from Utility Computing a collection/group of integrated and networked hardware, software and Internet infrastructure (called a platform). Using the Internet for communication and transport provides hardware, software and networking services to clients. These platforms hide the complexity and details of the underlying infrastructure from users and applications by providing very simple graphical interface or API (Applications Programming Interface).

In addition, the platform provides on demand services that are always on anywhere, anytime and anyplace. Pay for use and as needed, elastic, scale up and down in capacity and functionalities. The

hardware and software services are available to general public, enterprises, corporations and businesses markets.

The problem definition is referred as perceived gap between the existing state and desired state. In the existing system the user can only schedule the conference, and chat conversation is available. The Drawbacks of existing system are time consuming, video conferencing is not available, document sharing is not available.

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work. The main use of proposed system is to reduce the work load. The existing system has several disadvantages and many more difficulties to work well. The proposed system tries to eliminate or reduce these difficulties up to some extent. The proposed system will help the user to reduce the workload and mental conflict.

The proposed system helps the user to work user friendly and user can easily do his jobs without time lagging. In case of Proposed System, the application allows video conferencing, user can upload documentation and the user can make use of white board facility.

II. LITERATURE SURVEY

[1] The OAuth 1.0 Protocol: Internet Engineering Task Force: E.Hammer-Lahav- The OAuth gives a method for the clients to access the server resources on favor of a resource owner, it can be a different client otherwise it can also be an end user. The OAuth provides a process to end-user for authorizing the third party to the server resource without sharing the password or the user's name; this is done by using the user agent redirection.

OAuth protocol is created by small community of the web developers from the variety of website and also from the other internet services. The OAuth's resulting protocol was made stable at the 1.0th version in the year 2007 and it was revised as revision "A" in the year 2009.

In the model of the client /server authentication, the client will utilize the credentials to enter its resource which will be hosted by the server. To access the client resource it has to get the permission from the owner of the resource, the permission which got will be expressed

in the form of a token and matching shared secrete. To the contrast of resource's owner credentials, tokens can be issued with the limited life time and the restricted scope. [2] Socially Aware Cloud Storage: Note On Web Design: Tim Berners-Lee-The Current Web Applications customary manners are based on a web site. The web site is kept in the state of the system, and JavaScript programs enclosure of web pages. Users expected to have an identity on the site, and the site manages approaching to information about them and about others with some flexibility, typically based on different types of information, and different groups of people.

An average web 2.0 architecture is that the information, normal user-generated content, is stored and used within the site. There is a noticeable loss of functionality from the fact that the data is not easily reusable outside the site, and that when access to the data is controlled, it is controlled in terms of the user-names on that site.

[3] Remote storage: IETF Internet Draft.: M.B.de Jong and F.Kooman- The early version describes a protocol by which client-side applications, running inside a web browser, it can communicate with a data storage server that is hosted on a different domain name. By this way, the provider of a web application need not also play the role of data storage provider.

This protocol supports retrieving, storing, and removing individual documents, and also it list the contents of an individual folder, and its access control is based on bearer tokens. In the remote storage the server servers may also provide a way to create access tokens directly from their user interface. This kind of functionality would be aimed mainly at developers, to manually copy and paste a token into a script or debug tool, so bypassing the need for an OAuth dance. Clients should not rely on this in production.

[4] Open peer: Proposed peer to peer signaling protocol: Robin Raymond-The Web RTC has now implemented open standards for real-time, plug in- free video, audio and data communication. In the present days many web services already use RTC, but need plug-in downloads or else native application.

The process of downloading, installing and updating plug-in can be complex, error prone and annoying. The method of Plug-in can be difficult to deploy, debug, troubleshoot, test and maintain—and may require licensing and integration with complex, expensive technology. It is frequently difficult to persuade people to install plug-in in the first place.

The Chromium-based application and its extensions can also incorporate get User Media. The adding of audio Capture and/or video Capture request to the manifest enables permission to be requested and granted only once, on installation. Because of this the user is not asked for permission for camera or microphone access.

III. ARCHITECTURE & WORKING METHODOLOGY

As from the architecture, it can be observed that launcher should register with the application giving his login credentials. After that he can schedule a conference, where the participants are notified via email. Once the launchers create a conference in third party plug-in named wiziq, it processes an access link. Using this access link the participant can view the conference, if they are register with the launcher. The application is also provided with whiteboard facility, chatting facility and upload document facility.
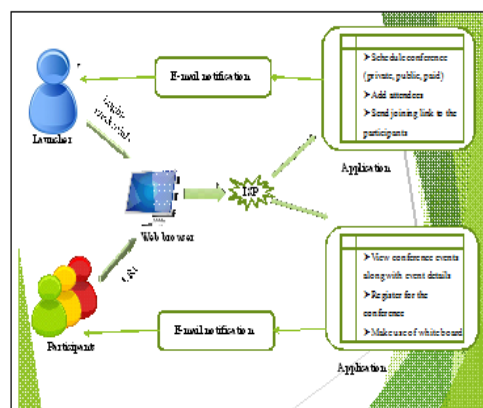
IV. IMPLEMENTATION
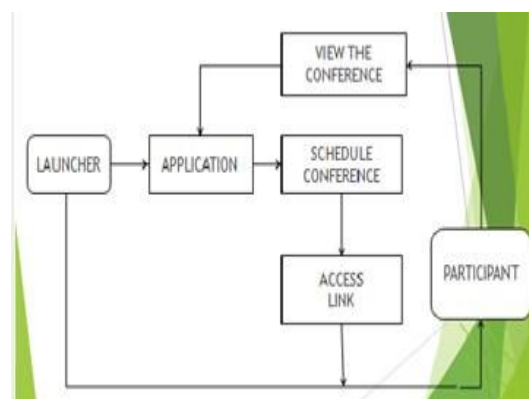
From the dataflow diagram, the launcher with the help of application can schedule the conference once the launcher schedule the conference it process an access link. Using this access link the participant can view the conference.

The implementation is carried out in four methods,

A. Communication widget
B. Connector to resource service
C. Video webrtc
D. Web centric widgets

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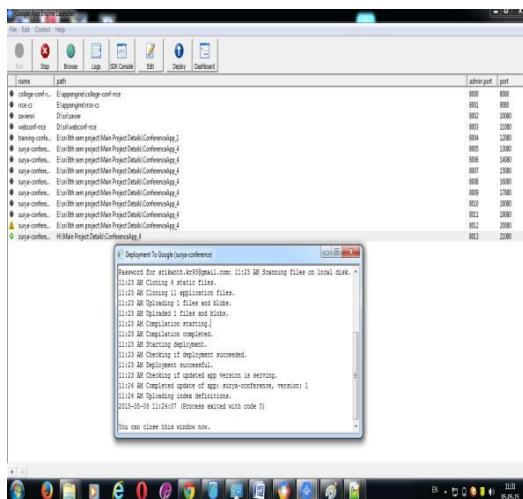
V. RESULTS

A. User Create an Application

The below figure shows how a user will create an application in the app engine.
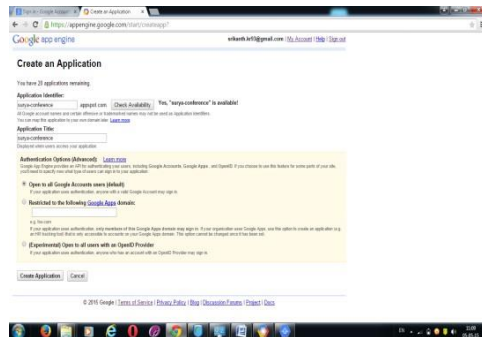
### B. User Launches the Application

It shows how the user launches the application in the Google app engine Launcher.

Once the user application is successfully created in the app engine, then the user can launch his application in the Google App engine Launcher. To launch a application add an existing application from the file, click on run and wait for green mark at the beginning of the application name, latter click on browse. By this way user can launch the application in the Google app engine Launcher.

C. User Get Into Home Page of Application

It shows how the home page of the application is displayed to users.
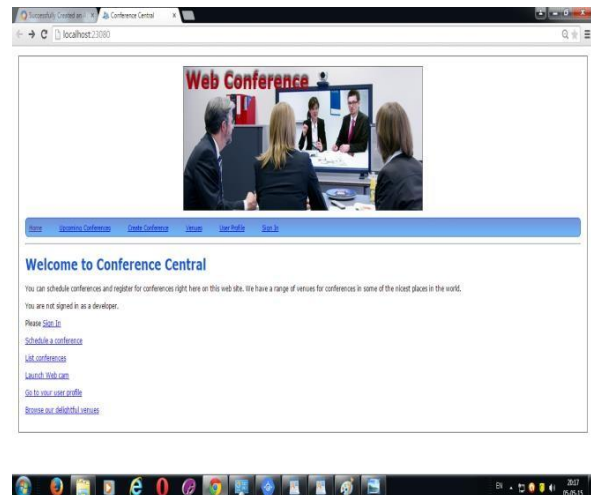
Go to the User Profile page of the Conference Central application. Go ahead and login if asked. Create a User Profile in the User Profile page. Make sure the email for receiving notifications is a valid email account where *you* receive emails. Do not use a random email address, or you will run the risk of having email sent to an innocent bystander when new conferences are created. Register your interest in one or more topics by selecting one or more topics from the list.

On the Create Conference page, create a conference. Keep the max Attendees to 50 or less to minimize usage of the data store quota for this application. You will see a list of tickets for the newly created conference. Notice that the new conference is announced at the top of the page. The User Profile page should now show the conferences you have scheduled. Go to the Upcoming Conferences Page.

Scroll through the page -- you see various tables showing the conferences filtered by different criteria. Obviously in a production application, you wouldn't have a page that displays multiple tables like this, but the purpose of this page is to display the results of queries that use different kinds of filters. Everyone in

the classroom is adding conferences, so if you update the page you might see more and more conferences being added.

CONCLUSION

The proposed system named –"Web Conference Central Using Cloud Computing" enables the launcher to create a conference by first signing into the application. It also allow the user to see the conference that are registered, it also notifies the user if there is any updating in the conference. This application is launched in Google app engine. The Google app engine provides auto scaling and load balancing. This enables the application to run efficiently even under high load. This application provides the facility like scheduling the conference, viewing the conference; chatting facility and document upload option.

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