Interoperability with Identity Factors and Distributions

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Abstract*- this paper proposed for a system that provides an enhanced stage to the corporate users with all the elimination of third party request needed for different structuring and security mechanism. The administrator associations will be made centralized with navigated monitoring to have all considerations of threats and resource requirement. The sensitivity required to associate the business work data will be organized on encrypted repository with self-defined formulation. The assertion of customized schema for distributive policy design will be integrated in he the platform for the collective usage with all considerable standards structuring system is describe in this paper.*

I. INTRODUCTION

This application is designed to provide a centralized platform and provide different shared resources with respective to different operational activities with different security methodologies which can be customized for usage and integration. The application will provide all the required needs of the organization. The application will incorporate even the functionality with respect to multiple group integration and management where are all different required groups can be added for the working.

The application is designed in such manner that multiple clients can take the benefits of all the resources and requirements merged in one place. The hosting company will provide the authentications to the client company is whereas from the client company the first login will be the administrator and that particular administrator will have all the related customization rights for working on the application platform. The application is purely based on service where all the updates on the regular interval will be checked for the technology changes and for the upgrades of resources that are integrated on the application.

The administrator will have all the structuring rights of application with consideration for work for example the platform can be used for direct transfer of users or adding individual users to a group. All requirements for a group to work and collaborate will be provided to company with help of multiple cloud resources and can be used in a customized way with all the rules assigned by the administrator.

The application facilitates the process of setting up account for the users. An identity and access management system is provided for the administrator with ability to instantly view and change access rights. An access right system within the central directory should automatically match employee job title, location and business unit ID to manage access requests automatically. These bits of information help classify access requests relevant to employees' existing positions. Depending on the employee, some rights might be inherent in their position and automatically provisioned, while others may be allowed upon request.

The application will provide multiple pattern for security and customize their own security pattern. The application is also integrated with the control provision where different required information can be fetched in respect to the activities so that the administrator will have control information with respect to the working of all the users that has been incorporated on the platform to manage different activities.

All the related implementation of rules will be customizable and it can be selective in nature. If a particular policy has to be implemented to a particular group then it can be selected through dropdown menu.

Identity and Access Management (IAM) is a security discipline which ensures right person will access right resources which is very important in this industry. This security practice is very crucial for any industry to perform. It not only requires technical experience and experts but also requires business skills.

The Enterprises which develop this IAM capabilities will not only reduce their identity management cost but also support new business initiatives. Single sign-in is a session authentication which will have a user id and password to be provided by the user. This also authenticates all the application that the user has rights eliminating the re authentication when the user switches from one application to other.

II. PROBLEM DEFINITION

This paper describes to manage the business process for the project related to the business clients Resource Management and Identity Management are very important and according to current scenario the organizations have to take extra care and measures to manage the resource and identities for security purpose hence to overcome this problem we create a centralized platform where multiple clients can use the application simultaneously. Provide a tool to the customers to customize the application to their needs and also can implement their own security policies and help to work in a collaborative way.

III. EXISTING & PROPOSED SYSTEM

Resource management and identity management is very important to manage the business process for the project related to the business clients. According to the existing scenario the organizations have to take extra measures to manage the resources and identities for the security purpose. Some of the concerns we found

- Required multiple integration for manage multiple resources
- The work platforms will be confusing as it is not centralized
- Existing environment is costly as we require multiple resources
- Platform working is not supported
- Security aspects require extra implementation for the concern tools
- Synchronization of data is not supported
- In the existing environment centralized rule based system is not supported
- Central control mechanism is not supported

As we have seen that in the existing system we have to face multiple concerns related to the identity management and resource implementation now we are developing our proposed system that will help to manage these concerns the main point that has to be mentioned

- Our platform helps to manage identities
- Multiple identity management options are provided
- Central control rules system is supported
- Central control resource management it supported
- Easy units' integration is supported
- Helps to identify and work on the related resources
- Supports clouds for the central working
- Help provide integration with the third party software
- Support collaborative working
- Supports brand platform process

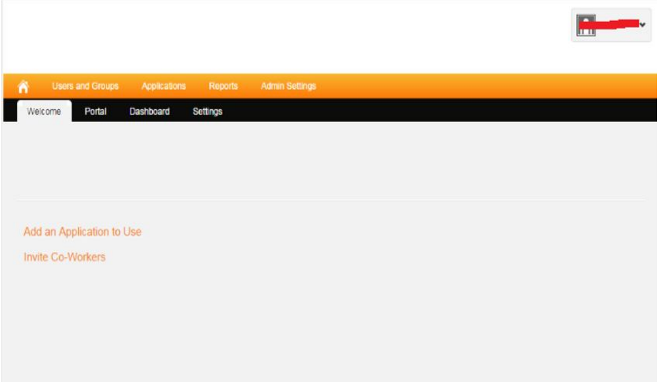


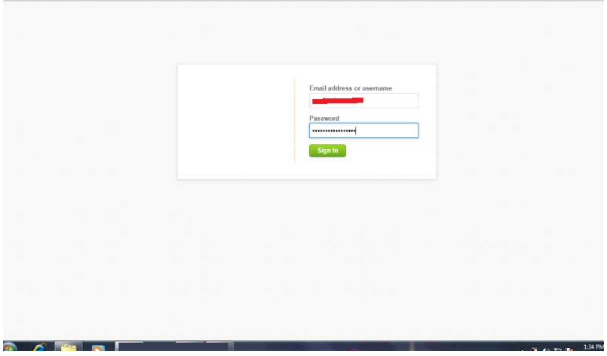
Figure1

Above figure shows the Admin's panel where he has central control over the entire application he can add the users individually or add users to a certain group he can also shows list of application categories which can be used by the users, the admin can generate report of the users and about their applications being used and can implement security in order to protect the application from unauthorized access.

IV. IMPLEMENTATION, ANALYSIS AND RESULTS

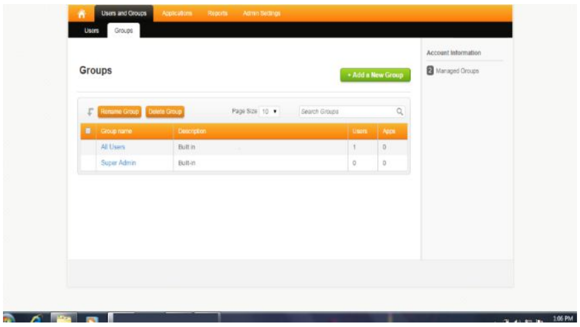
1. Login

The Admin inserts his login id and password in order to access the application


Email address or username
[redacted]
Password
••••••••••••••

2. Users and Groups

Here we can get the information about the users who are currently active and using the application and also add the users individually or can add the users to a group, the admin can also remove the users if he wishes to.



Groups

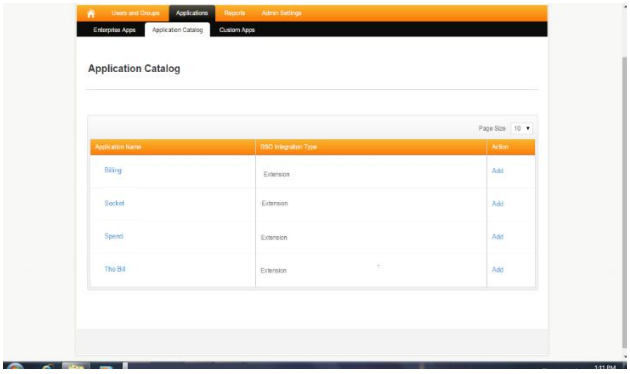
	Group name	Description	Users	Apps
	All Users	Built in	1	0
	Super Admin	Built-in	0	0

Account Information

2 Managed Groups

3 Application

Here we get a list of third party application catalog which we can use for our working like billing, socket, speed etc. We can add which users are eligible to access that application. Enterprise application shows us list of applications selected for working and also the users and group users who are using the application, assign the application to the users or add a new application to the list or delete the application. CustomApplication shows the application which we have customized to our use.



Application Catalog

Application Name	SSO Integration Type	Action
Billing	Extension	Add
Socket	Extension	Add
Spend	Extension	Add
The Bill	Extension	Add

4. Report

The reports are generated about the users using the applications. The admin gets to know about the roles assigned to users and their activities like when did they login into the console which application did they added to their list.

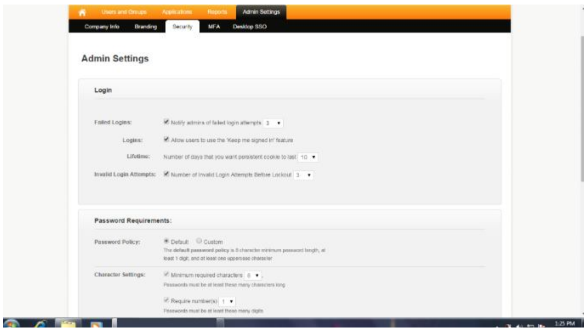
5. Admin Setting

The system must be secured with the security system which is required to be included on the system which again requires self-customized implementation option where the input will be provided to consider a particular action.

Multiple factorial system is implemented to make the user to provide his authentication credentials twice. This can be set to a particular user or all users and can be asked once in week, once in a month or every session.

A report system to provide details about the users and their activities in regards to the resources that are provided is implemented[2]

Identified with combined personality is single sign-on in which a client's single confirmation ticket, or token, is trusted over different IT frameworks or even associations. This setup will enable the client to access the all the resources without providing his authentication credentials again to access the resources



Admin Settings

Login

Failed Logins: ☑ Notify admins of failed login attempts 3

Logins: ☑ Allow users to use the 'Keep me signed in' feature

Lifetime: Number of days that you want persistent cookie to last 10

Invalid Login Attempts: ☑ Number of Invalid Login Attempts Before Lockout 3

Password Requirements:

Password Policy: ● Default ○ Custom
The default password policy is 8 character minimum password length, at least 1 digit, and at least one uppercase character

Character Settings: ☑ Minimum required characters 8
Passwords must be at least these many characters long

☑ Require number(s) 1
Passwords must be at least these many digits

V. CONCLUSION

The following application will help the organization to carry their work under a single central control with all the required resources for the project are made available in one central location. All the respective level can be managed from the application to segregate the security with respect to customization.

Multifactor Authentication (MFA) application is a security system in which more than one form of authentication is implemented to verify the legitimate user. The main aim of the MFA is to form an extra layer of security to make the unauthorized user difficult to access. Multifactor Authentication is achieved by combining two or three independent credentials what the user knows (knowledge-based authentication), what the user has (security token or smart card) and what the user is (biometric verification). Single-factor authentication (SFA), in contrast, only requires knowledge the user possesses.

The most important advantage of our application is detailed below.

For the user:

- Access to a variety of systems yet is identified by the same user name

- Only required to provide identification once to access all systems inside the IT environment

For the administrator:

- Finally having complete information regarding how many accounts a given individual has in the entire IT environment
- Management of all accounts across a variety of systems takes place from one central location
- The management of user access to objects, depending on the model selected, takes place from one central location
- Generation of aggregated reports of a user's activity throughout the entire IT environment

The ability to block or delete all of a user's accounts from one central location using a single button for the entire IT environment

VI. FUTURE ENHANCEMENT

In the future the report that will be fetched to check the working functionalities can be made more graphical.

In the future we will decide to categories more defined resources that can be even just checked first before the integration

REFERENCES

[1] Mark Wilcox "Implementing LDAP"

[2] Mark Stanislav "Two-Factor Authentication"

[3] Golemonn, Sara (2006). Extending and Embedding PHP. ISBN 978-0-672-32704-9

[4] Lerdorf, Rasmus (2007-04-26). "PHP on Hormones – history of PHP presentation by Rasmus Lerdorf given at the MySQL Conference in Santa Clara, California"

[5] "IBM Redbooks - Developing PHP Applications for IBM Data Servers".

[6] Kriill, Paul (19 October 2005). "PHP catching on at enterprises, vying with Java".

[7] John Harney "Application Service Provider"

[8] Armando Fox and David Patterson "Engineering Sofrware"