GUJARAT TECHNOLOGICAL UNIVERSITY

(GTU)

INNOVATION COUNCIL (GIC)

Patent Search & Analysis Report (PSAR)

Date of Submission : 24/09/2016

Dear **Patel Miloni,**

Studied Patent Number for generation of PSAR	:	**16BE7_130020107065_1**

PART 1: PATENT SEARCH DATABASE USED

1. Patent Search Database used	:	Google Patents
Web link of database	:	https://patents.google.com/
2. Keywords Used for Search	:	EPR,SAAS,FRONTEND,BACKEND
3. Search String Used	:	Enterprise Resource Planning and Software as Service with Frontend and Backend
4. Number of Results/Hits getting	:	113

PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA

5. Category/ Field of Invention	:	Computer/IT Engineering
6. Invention is Related to/Class of Invention	:	patent related to Method and system for exchanging information between back-end and front-end system
6 (a) : IPC class of the studied patent	:	G06F17/3056,G06F17/30569,G06F21/6227,G06F9/541
7. Title of Invention	:	Method and system for exchanging information between back-end and front-end systems
8. Patent No.	:	US20110282969A1
9. Application Number	:	US13100974
9 (a) : Web link of the studied patent	:	https://patents.google.com/patent/US20110282969A1/en?q=epr&q=saas&q=frontend&q=backe&q=G06F
10. Date of Filing/Application (DD/MM/YYYY)	:	13/05/2010
11. Priority Date (DD/MM/YYYY)	:	13/05/2010
12. Publication/Journal Number	:	17/3056 20130101,9/541 20130101,21/6227 20130101
13. Publication Date (DD/MM/YYYY)	:	17/11/2011
14. First Filled Country : Albania	:	Albania

15. Also Published as

Sr.No	Country Where Filled	Application No./Patent No.
1		

16. Inventor/s Details.

Sr.No	Name of Inventor	Address/City/Country of Inventor
1	Vaidyanathan Iyer	Chandler, AZ

17. Applicant/Assignee Details.

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	APPSFREEDOM Inc	Chandler AZ

18. Applicant for Patent is : College

PART 3: TECHNICAL PART OF PATENTED INVENTION

19. Limitation of Prior Technology / Art

A system for exchanging information content between a back-end system within a restricted access environment and an end-user includes a front-end system and a manager node outside of the restricted environment, and an access node within the restricted environment. The front-end system executes a mini-application to output query data, wherein the mini-application is created using a mini-application designer, builder and plugin. The manager node receives the query data and applies business logic and connection parameters to generate a request for the information content in a first format. The manager node communicates the request to the access node in the first format. The access node converts the request to a second format particular to the back-end system, and conveys the request to the back-end system. Responses are received at the access node from the back-end system, converted to the first format and sent to the front-end system.

20. Specific Problem Solved / Objective of Invention

A method of exchanging information content between a back-end system and a front-end system comprising: creating a mini-application for use by said front-end system; receiving, at a manager node, query data from said front-end system using said mini-application; generating, at said manager node, a request for said information content in response to receipt of said query data, said request being generated in a first format; communicating said request in said first format from said manager node to an access node within a restricted access environment containing said back-end system; converting, at said access node, said request for said information content from said first format to a second format supported by said back-end system; conveying said request in said second format from said access node to said back-end system; obtaining, at said access node, said information content in said second format from said back-end system; forming, at said access node, a response in said first format, said response containing said information content; and sending said information content contained in said response from said access node to said front-end system via said manager node.

21. Brief about Invention

RELATED INVENTIONS

[0001]

The present invention claims priority under 35 U.S.C. §119(e) to: “System and Method for Managing Micro Applications,” U.S. Provisional Patent Application Ser. No. 61/334,235, filed 13 May 2010, which is incorporated by reference herein.

TECHNICAL FIELD OF THE INVENTION

[0002]

The present invention relates to the field of enterprise systems and, more particularly, to a method and system for exchanging information between end-users and back-end enterprise systems.

BACKGROUND OF THE INVENTION

[0003]

An enterprise system refers to the network of computers, interconnection equipment, and software components used within a business or organization to support the execution of business processes, information flows, reporting, data analysis, and so forth within and between organizations. A set of packaged application-software for an enterprise system can include, for example, enterprise resource planning (ERP), customer relationship management (CRM), supply chain management (SCM), strategic enterprise management (SEM), manufacturing integration and intelligence (MII), master data management (MDM), product lifecycle management (PLM), and so forth.

[0004]

An enterprise system can additionally include all the data for manufacturing, supply chain management, financials, projects, human resources,

etc., maintained in a common database. Through the common database, different business units can store and retrieve information. An enterprise system can be advantageous for a number of reasons, including standardization, lower maintenance, providing a common interface for accessing data, greater and more efficient reporting capabilities, sales and marketing purposes, and so forth.

[0005]

Enterprise systems are typically back-end systems that support a company's back office. The “back office” is generally considered to be the technology, services, and human resources required to manage a company itself. Such back-end systems are typically contained within restricted access environments that require appropriate authentication and verification before a user can access such systems.

[0006]

Unfortunately, access to enterprise systems can be complex and limited to certain users in an organization. For example, the use of an enterprise software system often requires a direct connection to the system. As such, use of these enterprise systems is typically limited to users with access to a desktop or a mobile workstation with disparate authorization and verification protocols. Furthermore, user interfaces (i.e., programs and hardware that control a display for the user and that allow the user to interact with the devices to these enterprise systems) can be difficult to implement and greatly varied among the various devices.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007]

A more complete understanding of the present invention may be derived by referring to the detailed description and claims when considered in connection with the Figures, wherein like reference numbers refer to similar items throughout the Figures

22. Key learning Points

Increasingly, users of enterprise systems wish to perform business processes from remote locations and using a variety of devices. These business processes can include, for example, order fulfillment and billing, workflow approval, proof of delivery, order capture, human capital management, customer sales and satisfaction, and even inventory and warehouse management. Typically, an organization stores business processes of an enterprise system on a number of different computing systems, which may be deployed on disparate platforms and disparate physical locations. Further, these computing systems may use different protocols, data structures, and databases, each system customized to cater to a specific business process within the organization.

[0021]

The devices from which users may wish to perform business processes can include a myriad of mobile devices, operating systems, wired and wireless processor platforms using web browsers, and so forth. Furthermore, these devices call for various user interfaces, i.e., programs and hardware that control a display for the user and that allow the user to interact with the devices. Exemplary mobile devices include, for example, personal digital assistants (PDAs), tablet PCs, smart phones, and the like.

[0022]

Embodiments of the invention entail methodology and a system for facilitating the exchange of information content between a back-end system contained in a restricted access environment and a front-end system. More particularly, embodiments of the invention facilitate the transfer of business data quickly and easily between multiple source enterprise applications of the back-end systems and various front-end systems.

[0023]

Throughout this discussion, items are assigned three- or four-digit reference numbers whose first digit or first two digits reflects the Figure in which the item first appears. That is, items first appearing in FIG. 1 are assigned reference numbers between 100 and 199, items first appearing in FIG. 10 are assigned reference numbers between 1000 and 1099, etc. Once assigned, a given reference number is used in all Figures in which that item appears

23. Summary of Invention

In summary, the present invention teaches of methodology and a system for facilitating the exchange of information content between a back-end system contained in a restricted access environment and a front-end system outside of the restricted access environment. Embodiments of the invention facilitate the transfer of business data quickly and easily between multiple source enterprise applications of the back-end systems and various front-end systems. Embodiments include mini-applications that execute on any of a variety of front-end systems, a manager node that provides integration, security, usage, and data services between the mini-applications and back-end applications operating on back-end systems via access nodes. The access nodes reside within the restricted access environment and are responsible for communicating with source systems, e.g. the back-end applications operating on the back-end systems. In addition, the access nodes enable access to any business functionality within SAP enterprise systems via the SAP business function enabler. A standardized format, also called an API query language herein, provides a business language for any front-end system, and eliminates the need to store any business data outside the back-end systems. Furthermore, the API query language is “lean” for communications between the front-end systems, manager node, and access node, and enables the receipt of business data in minimal communication traversals. In addition, embodiments of the invention enable continual access to, and ability to update information content at, business applications, thereby improving business productivity.

[0182]

Although the preferred embodiments of the invention have been illustrated and described in detail, it will be readily apparent to those skilled in the art that various modifications may be made therein without departing from the spirit of the invention or from the scope of the appended claims. For example, the process steps discussed herein can take on great number of variations and can be performed in a differing order then that presented.

24. Number of Claims : 38

25. Patent Status : Published Application

26. How much this invention is related with your IDP/UDP?

< 70 %

27. Do you have any idea to do anything around the said invention to improve it? (Give short note in not more than 500 words)

A User can also add deadlines to the followups. Alert Generation can also be made automatic so each time user has not to worry about generating alerts. and also the principles and features of this invention may be employed in various and numerous embodiments