

# Process Adaptive Web Services with Container Management System

Jayesh D. Kamble, Gaurav S. Apshete, Rekha V. Nagargoje, Sonam R. Jain

**Abstract-** *In highly dynamic and heterogeneous environment such as mobility transactional system and ubiquitous computing, software must be able to adapt at runtime and react to the environment. Furthermore it should be independent of a certain hardware platform and implementation protocol.*

*Our application determines the service of determined fertilizer industry with service based market for different dynamic transactions. On line services in the current Fertilizer Resource Planning web structure is not sufficient for working environment & not extractable for daily utility transactional sections. The daily transaction on the featured product won't be possible technically, physically, logically. There are certain Loop holes in this System .Hurdles comes day by day for Physical oriented activity And hence it is more time consuming activity. To overcome certain issues & loop holes about the plant of dynamic culture, we designed system for implementing calculus transaction filler between the manufacturer, trader, and franchisee daily utility report transaction with highly dynamic & heterogeneous environment. A CMS facilitates document control, auditing, editing and timeline management.*

**Keywords:** *Mobile transactions, CMS, runtime environment, Portal Alert Explorer*

## I. INTRODUCTION

Web services (WS) and service-oriented architecture (SOA) presents a set of unique testing challenges. As services are distributed, it is necessary to test.

They are using a distributed architecture. Furthermore, as these services may keep on changing, testing needs to be adaptive. Web Services provide the universal basis for the integration of networked applications and business processes that are distributed among the most disparate entities, both within and across organizational borders. The fundamental idea of Web Services is that applications are built by interacting with and composing external components services that are available on the Web, and that are not under the control of a single party or stakeholder. A new challenge arises from this idea: the success of service oriented applications is unavoidably depending on the capability of a service to autonomously adapt to an environment that is not fully under control.

Therefore a need exists for techniques that enable the flexible composition and adaption of web services. Second, formal analysis and verification techniques that provide the foundation for composition and adaptation algorithms that sometimes made use of semantic web services were presented.

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Petri net techniques, model checking and process calculi were discussed in detail and their opportunities and limitations explored. A tools session offered interesting insights into the capabilities of various tools and allowed participants to compare and position their approaches in detail.

Our application determines the service of exactly fertilizer industry with serviced market for different dynamic issues. On line services in the current fertilizer's web site is not sufficient for working environment & not extractable for daily features.

The daily transaction of the featured product can't be possible. The existing software determines the fertilizer issues on the telephonic and manual calculation. The regional manufacturing unit are not satisfactory interactive with the head quarter office.

- The daily extraction
- Rate determination process
- Manufacturing process
- Plant information
- Franchisee management
- Customer management

These are not satisfied issue to this sort of issue. There is no any online process so the database management can be done & can reach to the level of matured customer So to overcome certain issue about the plant of dynamic culture ; our application is ready to implement calculus transaction gap between the manufacture, trader , franchisee daily report transaction with highly dynamic & heterogeneous environment such as mobile insertions & ubiquitous computing software must be able to adapt of runtime and react to the environment.

In a CMS, data can be defined as nearly anything: documents, movies, pictures, phone numbers, scientific data, and so forth. CMSs are frequently used for storing, controlling, revising, semantically enriching, and publishing documentation. Serving as a central repository, the CMS increases the version level of new updates to an already existing file. Version control is one of the primary advantages of a CMS.

### 1. Literature Survey

Customer's demands regarding to such fertilizers company or any normal company as he should get Daily updates about products news , want to reduce headache of calculations , customize client's records efficiently, most important easy to handle database management, No loss in terms of money in business, because of wrong information , Attractive business deals , Ease to add, delete, modify contents of website by admin

All these Customer requirements / demands which we have seen were accomplished via telephonic conversation, mailing, postages etc.

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As we considered these techniques, there are some demerits such as miscommunication; loss of information takes place, more consumption of time.

As taking into consideration the technical demerits of the available techniques, we come to conclusion to have the better solution to overcome and better resolution for these concepts.

Some of the fruitful trails we considered here as mentioned below-

Creating a website with centralized server.

Execution of the mailing reactor gets the adverse effect in bulk mailing and confidentiality level.

Taking into implementation for intranet, it seems to be limitations for the province and network circumference limitations. Scrutinizing the level of market, taking into considerations of the competitors, the solution for the social web services seems to be flaw-rant security aspects. So, exposing the confidential things is the exclusive demerit from other disadvantages.

### II. PROPOSED WORK STRUCTURE

Web services which we are going to develop , to overcome the demerits of traditional methods are as follows

#### i. Login web service

In this we are providing the web service for login to the Regional sub domain & manufacturing unit. By using this service the one, holding that authority can make a view to their manufacture unit and all the details regarding fertilizer process. We are going to add the authentication levels as per the authorized person. Keeping all the concerns in mind, we are designing the security passwords. Ex. Kolkata, Chennai etc.

#### ii. Fertilizer Description

We are giving the control to the Admin, to view the description of fertilizer like. quality 1 and quality 2 of all the regions. The various qualities of fertilizer available to the company that description can be seen as the services those who are interested can see the information. E.g. Plant transaction, Employee info etc.

#### iii. News Allotter Web Service

Suppose the Admin wants to convey the message to the Manufacturers or Franchises or Admin like to set up the message & update. Suppose there is the new quality product at the new scheme or new rates which will be shown as news to franchisee so that they will see and purchase the fertilizer accordingly. Those clients, Regions or franchisee has to take this web Service by purchasing or payment base.

#### iv. Ferti-Extractor for regional web Service

Suppose there are multiple units in single region so the franchises is given to the single developer for that region. So he can purchase this web service on his web site to view how much fertilizers extracted on particular date. How much extraction of fertilizer takes place at different units as number of employees differs according as per the branch and depending on all these factors the extraction of fertilizer will vary.

#### v. Ferti-rate current Determination

This Web Service provides the daily & current Rate of fertilizer which is setup by the admin. This service can be provided to the franchises Manufacturers for identify the

Ferti-Rate current determination. Due to certain price hikes the rate of fertilizer can vary, so we provide the service to admin and he will set the rate as per all the conditions.

#### vi. Employment Manipulator

Employment manipulator is the kind of web service in which on the Purchase of this web service, Regional Franchises. Admin can watch the details of the employee - login is given to the franchises, Admin, officers etc. The company is also known by the employees which they our hiring, and the other factories who wish to jointly work with this fertilizer company can know all information of the employees, whether the employees are good, criminals, died, thief and so on stuff about the employees.

#### vii. Ferti calculus

Ferti calculus is used for ferti calculator & much more. The Rate of the fertilizer is calculated through these formulae and all the quality rates are decided and determined accordingly. These rates are followed by franchisee, Manufacturers for their workings. This information is quite secrete as only shared with the admin.

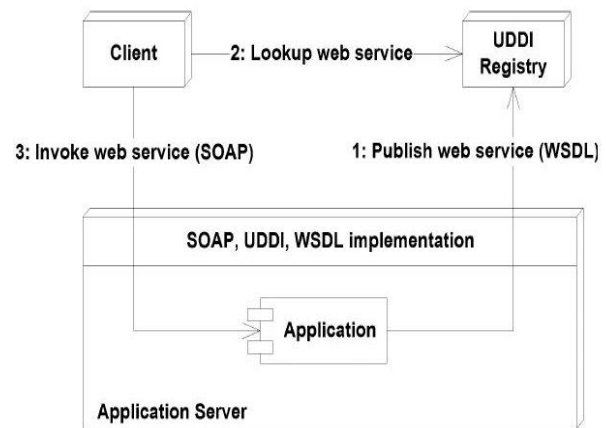


Figure 1. working of web service

A Content Management System portal, so that a central location of multiple bits and pieces of information the data and images you need to make accessible to your employees ,vendors, the media and whoever else you desire to access the system. It is a highly effective tool enabling both specialists and non-technical users to create, edit, manage, publish and distribute a variety of content (text, graphics, video, etc). Hence, proposed system will be used provide the common, flexible and user friendly interface to create and publish the website. Within our project, we are going to create CMS including process of adding, modifying new content to webpage; the pages content are stored in database, not in file server. We are using .NET framework 2.0 with Ajax toolkit, web server IIS 5.0 and web browser IE6 with SP1, IE7. The purpose of this system is to add, delete, and modify the contents on web sites easily. The main goal is to enhance the performance of the system by managing system dynamically.

The Process Adaptive Web Services project can be used to create websites of various companies to provide their services dynamically. The possible applications that can be generated as Just dial.com, India mart etc.



### a. Operating Environment

The web services and container management system which we are going to develop, and which we are going to provide to others can run on any upgraded Browser easily. The prerequisite requirements of our web services and container management system is that ,it can be made in Asp.net only. Actually there is no hardware requirement for web services. So there is no need to set up the hardware for web services. We need to set up the hardware and software setup for container management system.

### 3.2 Performance Requirements

- The web service should respond to user within second. The system should be able to handle all inputs efficiently.
- The web services should not disturb with their applications.
- The CMS should not disturb with the browsers.
- Cost: The cost is depended on customer that the web services which he wants.
- The system must provide accurate results i.e. doing changes while using CMS
- The system must be fast in processing the request and response.
- The system should provide better flexibility, reusability, deploy ability.

### 3.3 Advantages

- Interoperability - This is the most important benefit of Web Services. Web Services typically work outside of private networks, offering developers a non-proprietary route to their solutions. Services developed are likely, therefore, to have a longer life-span, offering better return on investment of the developed service. Web Services also let developers use their preferred programming languages. In addition, thanks to the use of standards-based communications methods, Web Services are virtually platform-independent.
- Usability - Web Services allow the business logic of many different systems to be exposed over the Web. This gives your applications the freedom to chose the Web Services that they need. Instead of re-inventing the wheel for each client, you need only include additional application-specific business logic on the client-side. This allows you to develop services and/or client-side code using the languages and tools that you want.
- Reusability - Web Services provide not a component-based model of application development, but the closest thing possible to zero-coding deployment of such services. This makes it easy to reuse Web Service components as appropriate in other services. It also makes it easy to deploy legacy code as a Web Service.
- Deployability - Web Services are deployed over standard Internet technologies. This makes it possible to deploy Web Services even over the fire wall to servers running on the Internet on the other side of the globe.

## III. CONCLUSION

Automization of financial transaction through web services is done. It provides manufacturing handling process with stock access to the server. Dynamicity by the admin to alert & current updated activities. Centralized plant server is

maintained to handle with ease. It provides Control panel with versatile access on server for web service techniques and Container management system for web site fired targets & blocks.

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