

## Review on Silent Remote Software Installation

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### ABSTRACT

Now a days data is the big challenge in front of IT staff is the deployment of any software to new or existing client computers. Currently, organizations spend a lot of time and expense planning, designing, and rolling out the latest version of an operating system throughout the organization. Often this process is done manually, requiring a help desk professional to physically visit each computer.

Our Paper "Silent Remote Software Installation" is used to remotely install the software on client machine and that too silently i.e. without disturbing the client. The administrator can directly install the software on client machine silently, i.e. the client doesn't have to click next-next during installation of the software. The administrator has to verify that the client machine configuration is suitable for the software to get installed or not. If it is the administrator will directly send the image to the client computers. It basically plans the steps necessary to install and configure for any software.

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### 1. Introduction

The primary goal of the Remote Software Installation is to remotely handle the request of the clients and to install the software's on their machine remotely.

Remote Software Installation uses some of the existing services that may already be deployed and in use within an organization, as well as adds some additional services that one may or may not be familiar with.

Through LAN a Silent software installation can be used to deploy Operating system and requested software's by the clients without even interrupting the client after processing their request through server. Where the role of an administrator is to roll out a new version of the operating system to hundreds, even thousands of clients at one time, and do so from a remote location.

As per clients need administrator sends the requested software's by the clients on their machine without requiring the client to click on the next and finish buttons or selecting the necessary check boxes in the dialogues by forcing the installation to take place during image copy. It basically plans the steps necessary to install and configure any software.

By an IT staff today is the deployment of various software's to new or existing client computers is one of the most challenging and costly function. Currently, organizations spend a lot of time and expense planning, designing, and rolling out the latest version of an operating system throughout the organization. Often this process is done manually, requiring a help desk professional to physically visit each computer.

Either one needs to install 3 or 4 new programs on each computer without erasing the whole system or the second way is to burn all the distributives that one needs to a CD then go from one PC to another and perform some routine actions such

as clicking the "Next" and "Finish" buttons, selecting the necessary check boxes in the dialogues. It's not so hard to do if one needs to install the software on 5 or less computers so, one should have enough patience to perform the same actions on each computer. And if one needs to install 30 or 40 programs on 10, 20, 50 or more computers, it is very time consuming. For this purpose we develop LAN silent software installation.

LAN Silent Software Installation system is developed to do the tasks remotely on the client machine through server. Using this service administrator can roll out new version of the operating system to any number of clients. And all this processing is done from remote location. Using computer is impossible without installing the necessary software. One can use RIS to provide on-demand, image-based, operating system installations. This occurs over a network connection from a RIS server to a client computer. RIS can simplify the management of operating systems and applications and improve failure recovery.

A number of installation procedures that gained popularity recently are: 1) GHOST 2) PCRDIST 3) WMI's

### 2. Literature Survey

The World Wide Web is a vast and rapidly growing source of information. Most of this statistics is in the form of unstructured text, making the information hard to query. There are, however, many web sites that have large collections of pages containing structured facts, i.e., data having a structure or a schema. These pages are typically generated dynamically from an underlying structured source like a relational database. It will studies the problem of automatically extracting structured data encoded in a given collection of pages, without any human input like manually generated rules or training sets [2].

Search engine is a program which searches specific information from huge amount of data .So for getting results in an effective manner and within less time this technique is used. This article is having a technique which depends on two or more web documents which are generated from same server-side template. This technique does not provide any relevant data but searches for shared pattern and separates it into three sub parts then apply different ranking functions and stored it into database [3].

Internet presents a huge collection of useful information so extracting information from web document has become research area for which web data extractors are used. Web data extractors are used for extracting data from web documents which is the task of identifying, extracting, structuring relevant data from web documents in structured format [4].

Web is accessible large no of database for user can browsing those data very dynamically [6]. It is very important for many applications such as deep web data collection and meaningful labels are assigned. It is accessible data extraction method, ODE which automatically extracts the query result records from the HTML pages [5].

There are different ways to perform web data extractions. Manual extraction techniques are used. In that technique, manually writing the programs called wrappers or extractors to extract the data from the web page. But in this technique more man power is required. So automatic web data extraction technique is used that is supervised technique. But the problem with this technique is that designers must manually label the training examples for generating the rules also labelling the training example is time consuming and not efficient .So Trinity unsupervised data extraction techniques is introduced [1]

**3. Proposed system**

**A. Flow of Trinary Tree**

Fig. 1 show flow of trinary tree, It gathers web documents and range from [min max] as input. All documents need to be tokenized but need not to be correct XHTML pages. This range is for size of minimum and maximum shared patterns for which algorithm searches. The text is as a sequence of tokens and represents as a whole documents . Trinary tree is a collection of nodes. This flow first it creates a root node with web documents and set variable called *s* to max. Starting with this node the algorithm searches for shared pattern which is having size *s*. Pattern are searched and used to create for child nodes. It is used to create three new child nodes with prefixes, separators and suffixes. Prefixes are the fragments which are from the beginning of shared pattern. Separators are the fragments between successive occurrences in shared pattern. Suffixes are the fragments which are at the end of the text[4]. This process examined repetitively in order to find new shared pattern that make new node. If there is no shared pattern found then that means the tree is not expanded but variable is now

equal to minimum pattern size. The pattern size *s* is now greater than or equal to minimum pattern size.

Nodes in trinary tree represents the longest shared pattern which includes three nodes which are prefixes, separators and suffixes. These nodes are found at the beginning of input documents. So for in the first fragmentation the values of prefixes are null. Shared pattern occurs only once and then further process is repetitively formed for those three nodes. After trinary tree next process is to form regular expression which is used to travel the tree into pre-order[6]. It reaches to the leaf node that has inconsistency, every time its outputs a fresh capturing group to extract data that corresponds to particular node.

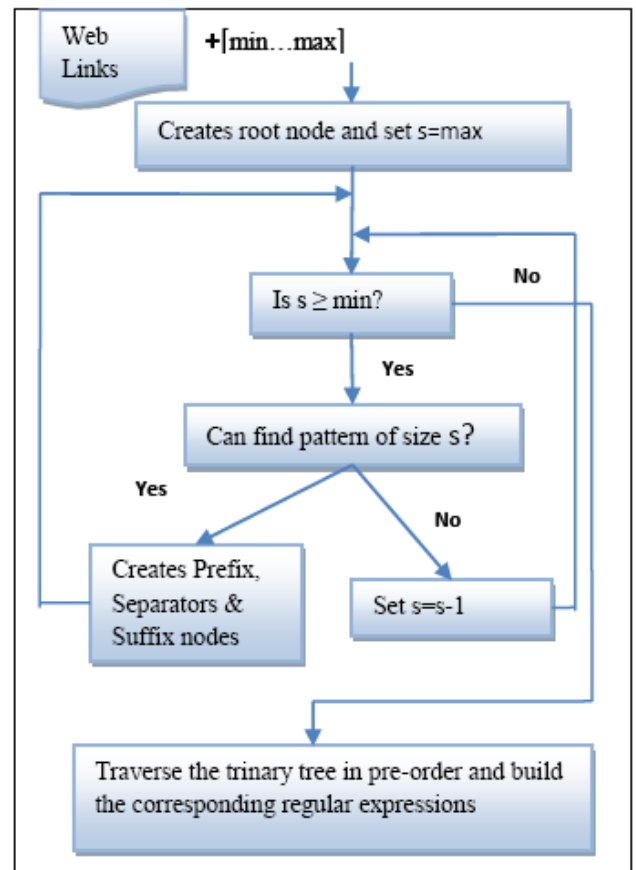


Fig. 1 Flow of Trinary Tree

**B. System Architecture**

The Fig. 2 Show the multi perspective, crawling mechanism for fetching the information from multiple websites. An automated stemming process is used to remove the unwanted data after fetching the website structure. The automatic manipulation takes place and the data will be formatted based on user requirement. The comparative analysis gives the best solution for the buyers. It also uses multiple features for comparison. And finally provide best website to system user.

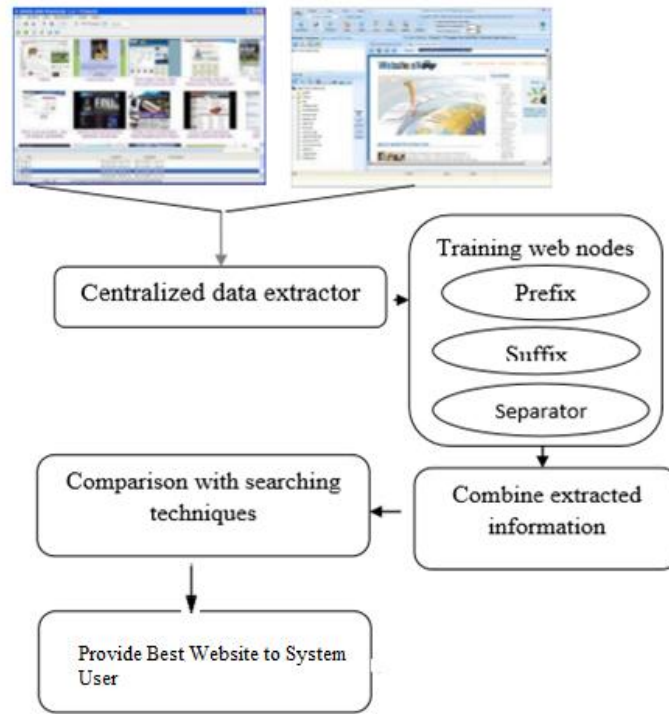


Fig. 2 System Architecture

**C. Wu & Palmer Words Similarity Algorithm Used**

The Wu & Palmer calculates relatedness by considering the depths of the two synsets in the WordNet taxonomies, along with the depth of the LCS (Least Common Subsumer).

The formula is  $score = 2 * depth(lcs) / (depth(s1) + depth(s2))$ . The score can never be zero because the depth of the LCS is never zero (the depth of the root of a taxonomy is one). The score is one if the two input concepts are the same.

The principle of similarity computation is based on the edge counting method which is defined as follows: Given ontology formed by a set of nodes and a root node (R) (Fig. 3) C1 and C2 represent two ontology elements of which we will calculate the similarity. The principle of similarity computation is based on the distance (N1 and N2) which separates nodes C1 and C2 from the root node and the distance (N) which separates the closest common ancestor (CS) of C1 and C2 from the node R. The similarity measure of Wu and Palmer [1] is defined by the following expression:

$$SimWP = \frac{2 * N}{N1 + N2}$$

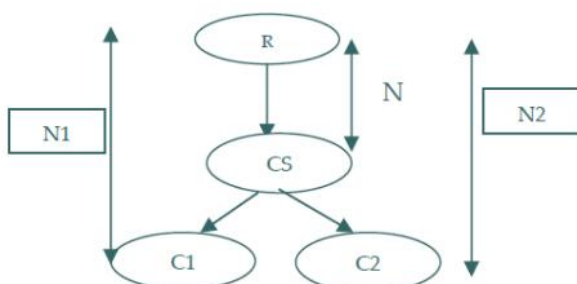


Fig.3 Example of A Concept Hierarchy

**4. Results and Evaluations**

**1) Mathematical Model**

Consider S is as system  
Set  $S = \{S1, S2, S3, S4, S5, S6\}$

1.  $S1 = Ws$  is the set of links of web sources and  $Li$  is the any http links for web site.

$$Ws = \{L1, L2, \dots, Ln\}$$

2.  $S2 = Wc$  is the set of web crawler to retrieve various information.

$$Wc = \{Wc1, Wc2, \dots, Wcn\}$$

3.  $S3 = U$  is the set of end users.

$$U = \{U1, U2, \dots, Un\}$$

4.  $S4 = T$  is the set for trinary tree of specific web sites.

$$T = \{T1, T2, \dots, Tn\}$$

5.  $S5 = D$  is the set of datasets where  $Dk$  is for keyword data and  $Dt$  is for tree.

$$D = \{Dk, Dt\}$$

6.  $S6 = A$  is the admin which is unit set.

Consider set C is the Capturing groups

$$Set C = \{C1, C2, C3, C4, C5, C6\}$$

$C1 = SP$ -find Shared pattern

$C2 = P$ -Prefixes

$C3 = S$ -Separator

$C4 = S$ -Suffixes

$C5 = RE$ -Build the regular Expression.

$C6 = T$ -Trinity tree

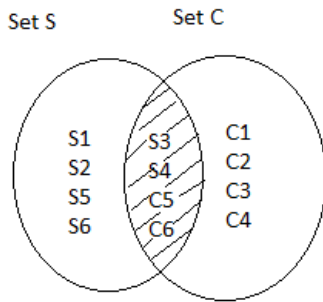


Fig.4 S n C

regarding our performance measures and determining if there is a significant correlation from the number of errors to the effectiveness of the techniques we have evaluated. We have conducted a Shapiro wilk test at the standard significance level on every measure and we have found out that none of them behaves normally. As a conclusion, we have used non-parametric analysis techniques.

The steps were the following: a) compute the rank of each technique from the evaluation results; b) determine if the differences in ranks are significant or not using Iman-Davenports test; c) if the differences are significant, then compute the statistical ranking using Bergmann- Hommels test on every pair of techniques.

**2) Statistical Analysis**

To confirm that the conclusions we have drawn from our empirical evaluation are valid, we need to perform a statistical analysis. This consists in performing a statistical ranking

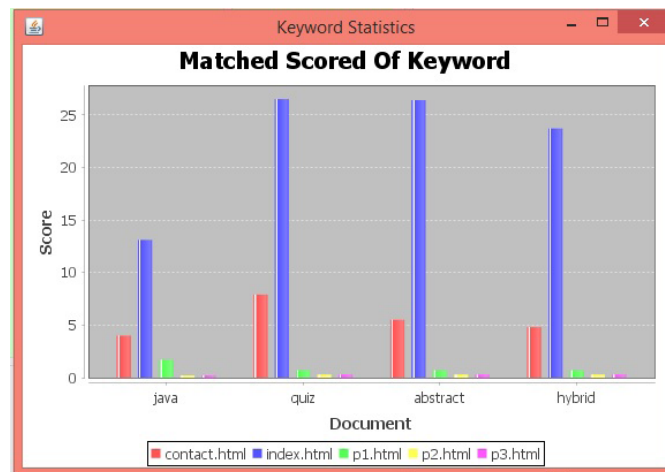


Fig .5 Graphical Analysis for Data Similarity On Web Page

**5. Conclusion**

'Silent Remote Software Installation' software was built within the specified period of time. It has been successfully implemented and has given reasonable performance. It can be easily used for any firm due to the user friendly interface provided.

This crash summarizes all the features of the application as well as standard software engineering principles. Which have been implemented for developing the application. The

application can be still unplanned and has various future enhancements.

There will be tremendous scope for such topic. Whereas the cost estimation for such project was also very low.

Thus 'Silent Remote Software Installation' project is completed successfully and we can conclude that software can be remotely installed on various machines on large scale within less time.

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