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A Proposed Architecture for Finding Missing Threads in Internet

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ABSTRACT

As increasing the usage of internet grows very rapidly present days. It creates challenge for my researchers how the connectivity links works such a heterogeneity network. Particularly on individual domain how the procedure works to transfer data or communication among the network. Identifying the structure at the individual level still one of the most demanded research activity. Here most of the researchers don't know where the missing procedure or how the missing procedure change our network structure. Identify the missing procedure it is necessary to find the network architecture completely. In this paper a new architecture helps to find the missing thread on the internet.

KEY WORDS: NETWORK ARCHITECTURE, MISSING CONNECTION, NETWORK PROCEDURE, INDEPENDENT SYSTEM, ROUTING PROCEDURE, PERFORMANCE EVALUATION.

INTRODUCTION

It is highly necessary for finding the network structure whenever user find difficult in mission connection. This work highly complicated in individual network structure (Floyd & Paxson 2001; Chang et al. 2004). For that it is necessary user need to build correct and absolute structure for network operations. There are various methods are currently existing for finding missing connection. One important observations identified most of this missing connection take place in peer-top-peer type of network structure only (Colitti et al. 2007; Cohen & Raz 2006). This take place especially at network exchange point or network exchange node. But constructing the accurate and obsolete network design is one of challenging factor for many researchers. In most of the existing systems collects the network steering information's that are all recorded in a table (Saravanan 2016). This table entry are updates at regular interval or whenever any transaction take place on the network structure. Additionally, network steering registries helps the user find the missing connection (Xu et al. 2004). Using this resources user identify the missing connection. There is no guarantee that each of this resources are providing complete details to the user, sometime providing information may be incorrect or inaccurate also. So user first need to find the gene unity of the available datasets. In most of research works network swapping points are not yet consider or this points are not included in network architecture (Lakhina 2003). This points normally consider least significant points. For that most of the research work devoted first find the missing connection, find the importance of the missing connection. Based on this information user need to find the missing connections.

Existing System

- Most of the missing connection details are identified through network swapping points.
- Information's that are all recorded and collected though network steering table
- Missing connection are identified based on the network architecture. For that it is necessary precise and outmoded structure (Oliveira et al. 2007)

Proposed System

- Initially work starts with missing links also identifies

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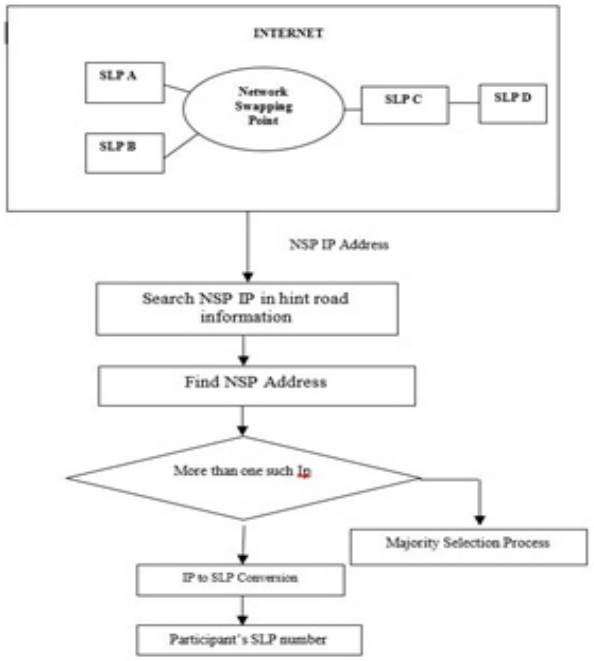
this link change any network stricture.

- Entire work divided into two steps process. First find the missing link, find the network structure.
- Find network swapping points. This helps to find more exchange point in our network. This process shown in the fig 1.

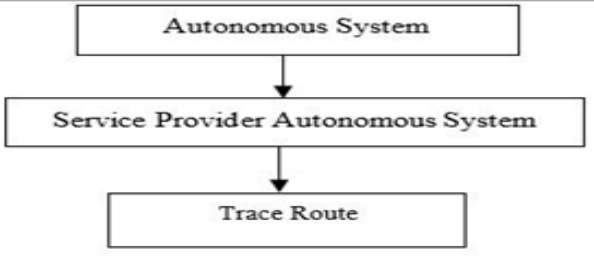
Figure 1.1: Proposed System



Experimental Setup:

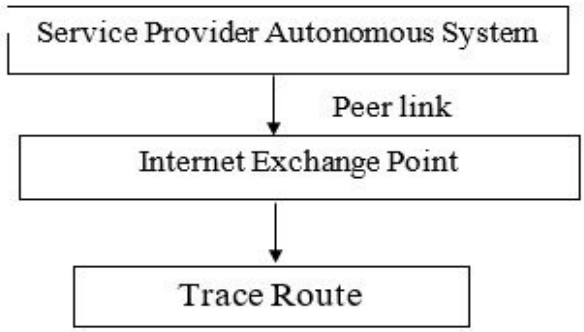
Patterns of the Peer-Peer Edges: Normally network systems transfer information from one device to other without user's knowledge. Especially in End-to-End transmission any communication or any information's are transferred from one device to other in terms of message or communication through the addressing concepts (Mao 2003). This can be done either direct or indirect transmission mechanism. This transmission done with help of end-to –end communication network or end –to-end server. This communication are controlled and monitored with help of steering board (Saravanan 2016). This board identifies all the devices connected in the network it will select any one of the device as the first receiver then start transmit the message or communication. This first receiver after receiving the information or communications it starts transmit the same to the rest of network devices. This model is shown in the fig 1.2.

Figure 1.2: Patterns of The End-to-End Edges



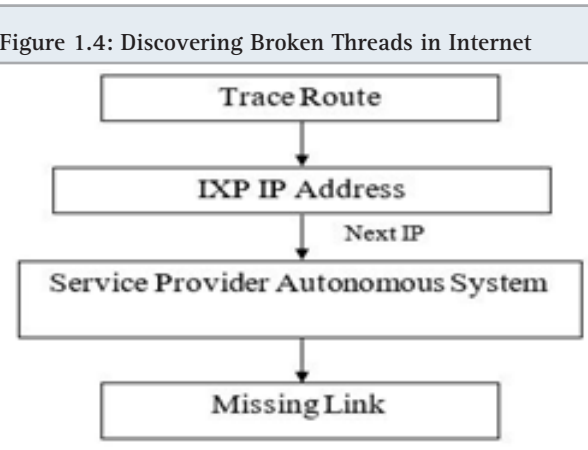
Patterns of the Service-Provider Edges: In End-to-End communication network single device selected as a first receiver through this rest of the devices in the network receives information or communications. Along this an examination supplier helps to provide rest of the services in the network (Mao et al. 2003; Mallick et al. 2019; Mallick et al. 2020). Normally these setups act as a resource provider for many business and commercial applications. It is shown in the fig 1.3. They provide various resources such as storage resource, communication resource or processing certain operational resource or the combination of these three services.

Figure 1.3: Patterns of The Service-Provider Edges



Discovering Broken Threads in Internet: This procedure explains the missing thread on the internet. It works based on the new created self-routing procedure. With help of self-routing procedure track the user's information effectively. For that first user need to collect the self-routing procedure and the correspond IPad dress. This way user can easily have identified the missing information. This process shown in the fig 1.4.

Figure 1.4: Discovering Broken Threads in Internet



Experimental outcomes: The proposed system works with missing link and identifies the network structure. Discovering of peer- peer edge, service provide edges and broken threads are constructed and tested with various inputs. The result of proposed work is shown in the fig 1.5-1.19.

Figure 1.5: Trace route in Machine 1

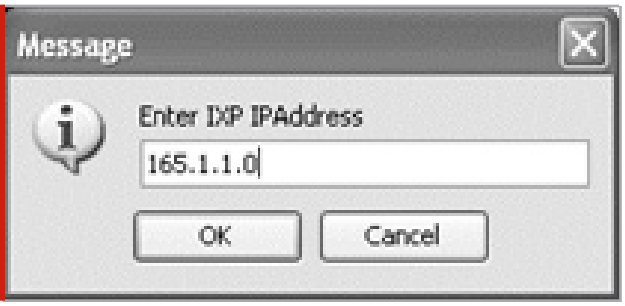


Figure 1.6: IXP in Machine 1

Figure 1.7: SPAS in Machine1

Figure 1.8: SPAS in Machine 2

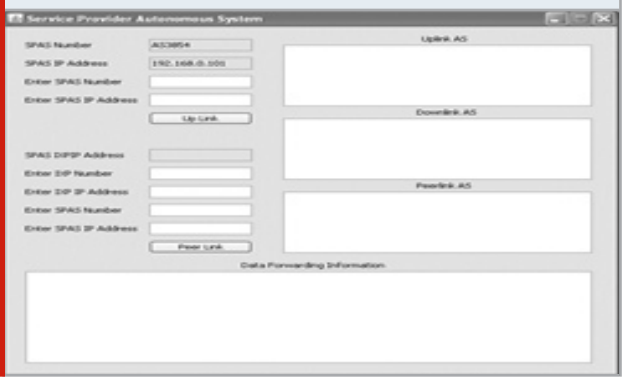


Figure 1.9: AS in Machine 3

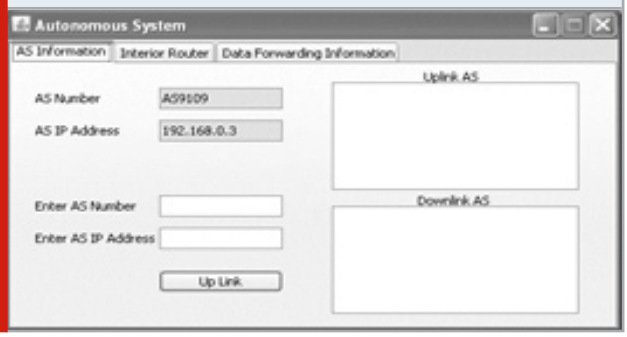


Figure 1.10: Host in Machine 3

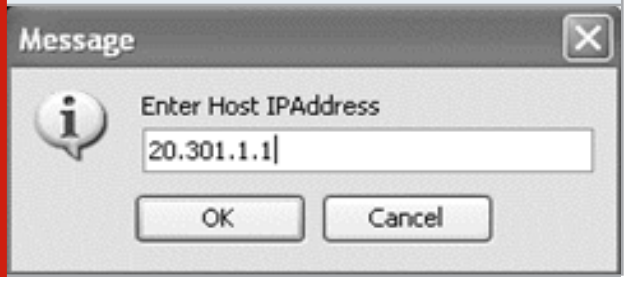


Figure 1.11: Machine 3 AS Shows All the Host and Router IP Address

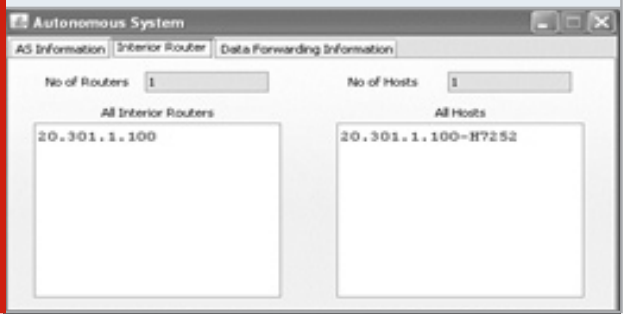


Figure 1.12: AS in Machine 4

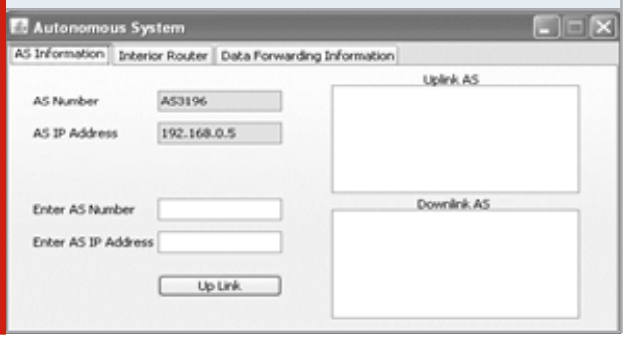
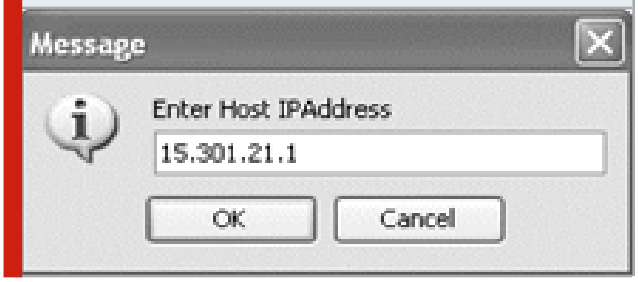


Figure 1.13: Host in Machine 4 and Machine 4 AS shows all the Host and Router IP address



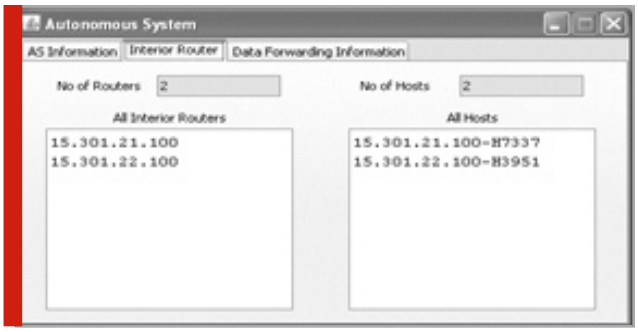


Figure 1.14: Machine 3 AS is uplinked with SPAS in Machine 1

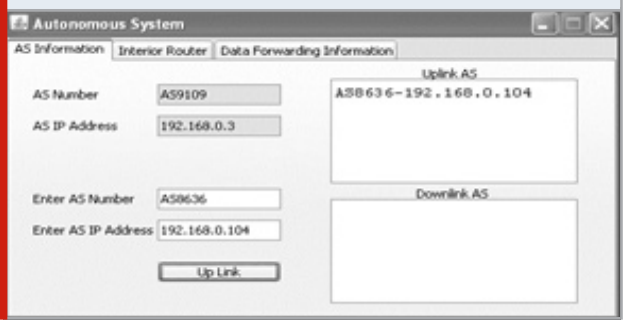


Figure 1.15: Machine 1 SPAS shows the downlink

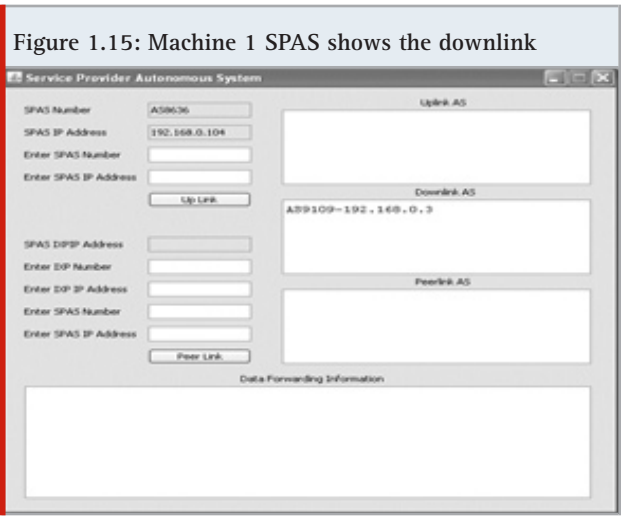


Figure 1.16: Machine 3 AS is uplinked with Machine 2 AS

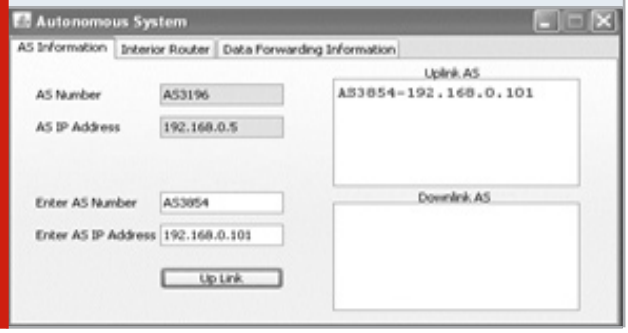


Figure 1.17: Machine 2 SPAS shows the downlink AS

Figure 1.18: Trace Route in Machine 1 shows all the IP address

Figure 1.19: Machine 1 Trace Route shows all the AS link route data and IXP link route data

CONCLUSION

Experimental setup identifies easily how many missing connecting in the network architecture through help of steering counter. Experimental outcomes also identify that IXPs are identified with help of end-to-end AS link. From the outcomes user observed that very few IXPs are circulate this information on steering counter. Information's available on the steering counter are not accurate and most reliable one.

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