

A project report on

# **Environment Routing Info Provision with Optional Visibility**

Submitted in partial fulfilment of the requirement  
For the award of the degree

**MASTER OF COMPUTER APPLICATIONS**  
Of



Visvesvaraya Technological University  
Belgaum, Karnataka

By

**MIDHUN C**  
**1CR18MCA72**



**CMR INSTITUTE OF TECHNOLOGY**  
**132, IT Park Road, Kundalahalli, Bangalore-560037**  
**2019-2020**

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Under the guidance of

**Internal Guide**

**Dr. Helen Josephine V.L.**  
Associate Professor,  
MCA Department,  
CMR Institute of Technology,  
Bangalore.

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**Mr. Chetan MR**  
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Bangalore.



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**2019-2020**

**CMR INSTITUTE OF TECHNOLOGY**  
**Department of Master of Computer Applications**  
**Bangalore - 560037**



***CERTIFICATE***

*This is to certify that the project work entitled*

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*Submitted in partial fulfilment of the requirement  
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Master of Computer Applications of the  
Visvesvaraya Technological University, Belgaum, Karnataka  
bonafide work carried out by*

**Midhun C**  
**1CR18MCA72**

*during the academic year 2019-2020.*

\_\_\_\_\_  
**Signature of the Guide**  
**Dr. Helen Josephine V.L.**  
Associate Professor, MCA

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**Ms. Gomathi.T**  
HOD, MCA

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PRINCIPAL, CMRIT

External Viva

Name of the Examiners

Signature with date

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# CERTIFICATE



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## CERTIFICATE

This is to certify that the project titled "Environment routing info provision with optical visibility" is submitted to Oxy Logica in fulfillment of the requirement for the final semester degree of MCA from CMRIT, Bangalore. The project is a bona fide record at work carried out by Mr. Midhun C (1CR18MCA72) under the supervision and guidance of Mr. Chetan MR (Technical Manager) Oxy Logica, Bangalore between the periods from 23/12/2019 to 27/5/2020.

The source code of the Project and executable file setup is not issued to the trainee as per the policy of the company.

Best regards,

A handwritten signature in blue ink, appearing to read 'Chetan MR'.

**OXYLOGICA**  
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Bangalore - 560 022  
Mr. Chetan MR  
Technical Manager  
(For Oxy Logica)

## DECLARATION

I, **Midhun C**, student of 6<sup>th</sup>Sem MCA, **CMR Institute of Technology**, bearing the USN **1CR18MCA72**, hereby declare that the project entitled “**Environment Routing Info Provision With Optical Visibility**” has been carried out by me under the supervision of External Guide **Mr. Chetan MR**, Technical Manager, and Internal Guide **Dr. Helen Josephine V.L.**, Associate Professor, **Dept. of Master of Computer Applications** and submitted in the partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications by the **Visvesvaraya Technological University** during the academic year 2019-2020. The reports has not been submitted to any other University or Institute for the award of any degree or certificate.

Place:Bangalore

Midhun C

Date:

(1CR18MCA72)

## **ACKNOWLEDGEMENT**

I would like to thank all those who are involved in this endeavour for their kind cooperation for its successful completion. At the outset, I wish to express my sincere gratitude to all those people who have helped me to complete this project in an efficient manner.

I offer my special thanks to my external project guide Mr.Chetan MR, Technical Manager, Oxy Logica, Bangalore,and Internal Project guide Dr. Helen Josephine V.L. Department of MCA, CMRIT, Bangalore without whose help and support throughout this project would not have been this success.

I am thankful to Dr. SANJAY JAIN, Principal, CMRIT, Bangalore for his kind support in all respect during my study. I would like to thank Mr. Chetan MR, Technical Manager, Oxy Logica, Bangalore, who gave opportunity to do this project at an extreme organization Most of all and more than ever, I would like to thanks my family members for their warmness, support, encouragement, kindness and patience. I am really thankful to all my friends who always advised and motivated me throughout the course.

**Midhun C**

**(1CR18MCA72)**

<b>S.NO.</b>	<b>Contents</b>	<b>PageNo.</b>
<b>1.</b>	Introduction	1
	<b>1.1</b> Project Description	1
	<b>1.2</b> Company Profile	3
<b>2.</b>	Literature Survey	5
	<b>2.1</b> Existing System and Proposed System	5
	<b>2.2</b> Feasibility Study	7
	<b>2.3</b> Tools and Technologies Used	9
	<b>2.4</b> Hardware and Software Requirements	10
<b>3.</b>	Software Requirement Specification	11
	<b>3.1</b> Functional Requirements	12
	<b>3.2</b> Non- Functional Requirements	15
<b>4.</b>	System Design	17
	<b>4.1</b> System Perspective	17
	<b>4.2</b> Context Diagram	18
<b>5.</b>	Detailed Design	19
	<b>5.1</b> Use Case Diagrams	19
	<b>5.2</b> Sequence Diagrams	21
	<b>5.3</b> Activity Diagrams	24
	<b>5.4</b> ER Diagrams	26
<b>6.</b>	Implementation	27
	<b>6.1</b> Screen Shots	27
<b>7.</b>	Software Testing	32



<b>8.</b>	Conclusion	36
<b>9.</b>	Future Enhancements	37
<b>10.</b>	APPENDIX-A Bibliography	38
<b>11.</b>	APPENDIX-B User Manual	39

# **1. INTRODUCTION**

## **1.1 PROJECT DESCRIPTION**

Distributed analysis for various network testimonial for multi interim expediency planning by various kinds of actions system is plotted and includes multi deliberation and tailored also. The design of system is to provide and promote various sorts and references which is required for clear working in terms of various components across distinct networks. It is involved with multiple types of projection and understanding which is incorporated by various dashboards. As different pursuit are similar and can encapsulate different workability contrasting kind of dashboards will be designed.

All types of designs that will be incorporated within a board will be provided by numerous types of prototypes and its services and also requirements of related enterprises related prototypes make use of. All types of appropriate workability that is needed for formulations incorporated by contrasting quality of engineering quality and options. The control is provided by numerous implied references so the users will be having a more rational understanding of reflection that need so as to perform and support to reduce complex working of dissimilar analytics.

The system provides a disparity of working which will impact workability planning and management incorporated with multiple types of analytical recommendations. Each analytical reference will be based on different Technology as multiple types of networks will be incorporated and will be utilized. Multiple testimonials that are required in intended examination for expounding is contemplated and each and all type of knowledge required for a specific expounding is provided in an inbuilt standard format. Multiple types off elucidation Windows is generated by system in present time to accomplish moving of differential workability by every potential along with approach implied. Multiple essences of network layer and varieties of intended action is traced and it is provided by a course of action which seize understanding could be attained.

All group of categorization which is provided can be generalized alone so that management will be properly accepted because vicinity with multi magnitude will be achieved. All types of references will be accelerated with in depth guessing where well delineated formations then various sorts of optical contemplation are

presented this will help the users for proper exposition. Expounding will be performed even the related activity based on operations can also be regulated from the same console system.

System incorporates a mechanism where all the environment inclination will be associated with real-time provision to have more distinguished references of the information making it a more persuasive system. Integrated working will be also established and even a notification system is added for more multidimensional work understandability as different users and activities will be considered. Automated reports are also achieved from the system this will make more enhancement in terms of handling the activity and event for the report generation multiple inbuilt prototypes are present which can be properly allocated and used by the users. We have to acknowledge the routing system so that any type of perfection information routing required in real time can be achieved through the system which will be referenced with different incorporated environment compatibility. The manipulation that is required for understanding different constellations is also associated with the system and these manipulations are provided in such a way show that any type of custom variations that are required can be controlled from Central reference.

That support that is required for multilayer working and for multiple types of protocol compatibility is also associated within the system and any type of distributed work concept required can be properly implemented in the security preferences are also accomplished. As multi users will be using the system for different types of approach implementation and for different types of activity integration the perceptions of security is purely define which can be automated can be revised with manual references also. The system is intended to provide predefined structured working for the knowledge preferences and for any type of related summarization of the information based on plan scenario.

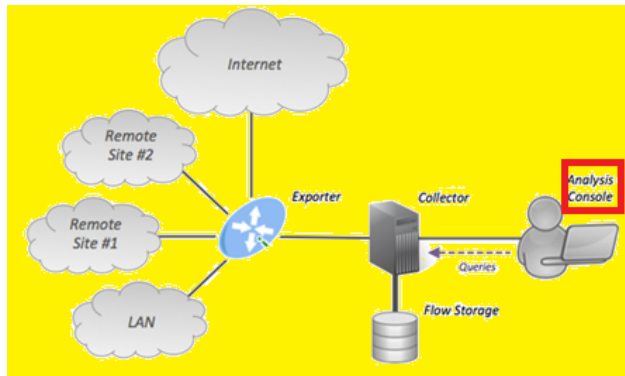


Figure-1

Shows how the analytical console works

The quality of the system to summarize information all standard considerations are acknowledged. All references of the work integration are associated with a single system this will be helpful for the conceptualization and approach implementation by different types of lions in their own way. Multiple types of conversion and communications are also included and these communications are away to enhance the related working because multiple things can now have a referential collaboration in terms of different operation we have performed on to the networks. Associations are clearly defined within the system that will help to make the standard formation and proper references of the system workability making it a global system for the work references.

## 1.2 COMPANY PROFILE

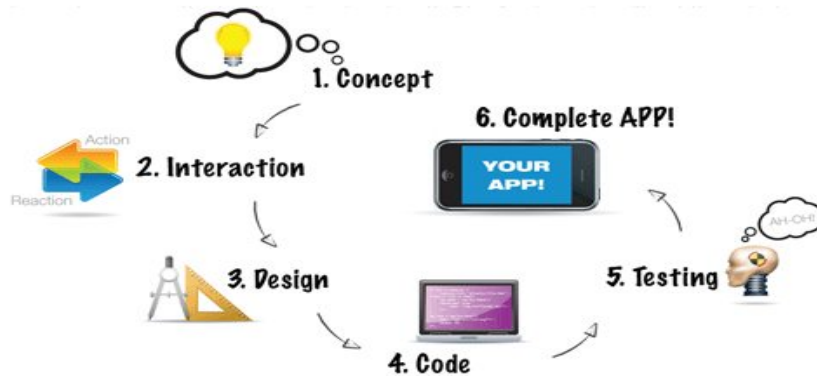


### Profile

The inventive thoughts and with the assistance of cutting edge digitalized arrangements the organization gives the customers all social part of working where the expected undertaking arrangements can be furnished with a legitimate auxiliary comprehension. Different kinds of discernment are attempted by the association with the goal that hundred percent consumer loyalty and specially craft arrangements can be given. Numerous stage support and the area direction on a worldwide scale is overseen by the association to help oversee diverse business

necessities for instance the task direction, business foundation in commitment, the related business stage structures, personality enough scaling, inquire about contemplations, vital execution and arranging and so forth.

The coordinated innovative work group will be related day in and day out as far as finding new methods and thoughts with the goal that we can help the customers for more advanced business systems administration and foundation.



Some of the main perfection the company is into is listed as following

- Website outline and advancement
- Custom advancement of Windows and UNIX
- Multi-level, customer/server arrangements
- E-stores
- Blog outlines
- Online stores
- SMS/GPRS applications
- E-business systems
- SEO, SEM and SMM
- Database plan and advancement
- Consulting and critical thinking
- Domain and Web facilitating

## **2.LITERATURE SURVEY**

### **2.1 EXISTING AND PROPOSED SYSTEM**

#### **2.1.1 EXISTING SYSTEM**

Complicated pattern working where different types of network identities and work abilities are associated to be organized is a major problem that has been referenced in the existing work scenario. Multi considerations of the strategic requirements are missing for example the related Automations and the related result time optical conversions. We have tried to understand different references of the problem and we have categorized the related problem as the following-

- In the existing system a major problem is that multiple vital references of the network activity and analytics is not supported from a single reference system

so different types of solution based tools are utilized which will indeed make the overall working for the company's expensive

- Considerations of the diverse encapsulation of different types of activities in real time is also not supported so any type of perception that is required to be studied in depth requires individual references and work configuration
- Multiple types of encapsulated plan perception cannot be obtained from a single in the existing scenario with the required customization. The existing scenario does not support multiple types of customization formations which are needed for the strategic reviews
- In the existing system even the activity automation is not supported the activities are required to be organized manually and for every type of enterprise operations related with the environment is required to be individually managed making it complex
- In the existing system even the central distribution for multi environment workability is also not supported and encapsulation of multiple environments is not supported
- Multiple proximity references by communication and combination of expression is also not supported in the existing work scenario to teach type of reference required for the articulation for the extended workability is not achievable
- Multiple data point references of integrated work accomplishment for different type of domains is also not supported in the existing system and all types of derivation has to be individually organized
- Various types of complex environment integration references is also required to be accomplished which has to be properly reference which makes the overall system quite complex and even more security problems are been associated

### **2.1.2 PROPOSED SYSTEM**

All types of intended problems that have been achieved in the existing scenario is being transferred in such a way that a proper reference of working can be achieved with all requirements of automation and standardization. Multiple types of environment can be successfully implemented in the proposed system and all types of accomplishment that is required can be properly achieved. The proposed system is incorporated with all types of understandability which has to be achieved for the considerable work references so multiple enhanced features are included.

Some important references are listed as following-

- In the proposed system all types of vital references required for activities and analysis can be organized from a single reference system and overall expenses will be minimized. The companies can select different reference of workability require and accordingly the considerations can be established
- Diverse incorporation and encapsulation of the activities with real-time perception of study is associated in the propose system which will be very much helpful to obtain the considerations of knowledge properly related to different types of network identity
- Multiple encapsulated plan perception with all types of strategic customization and reviews is provide the propose system any type of information formatting and any type of workability formatting is required can be properly implemented
- Activity automation is also important reference in the propose system we are all types of Differential workability can be optimized and can be achieved the system provides enterprise operations in such a way that more activities can be automated with regulations
- Multiple types off environment support and environment compatibility for different assistance of the services is provided in the proposed system



- The proximity of communication if supported in the proposed system which makes it easier for the uses as various types of network related extended working can be achieved from a single system
- Multiple types of data points and derivation can be accomplished which will be helpful to associate any type of related identity of the network so that in real time any type of integrated process for any type of Corporation that is required to be achieved can be associated

All types of complex environment integration references are supported within the system so different types of integrated compliance is properly associated with multifold security

## **2.2 FEASIBILITY STUDY**

Feasibility understanding is required so that all types of requirements can be gathered and can be successfully implemented so whatever the requirements are in terms of operations for The Real time scenario working, other considerations of technological requirements and the economic considerations can be acknowledged. Detail understanding will help us to try all types of plans that will be associated with development and this will help us to properly associate the work to maintain standards and practicality of the system.

Economic feasibility

Operational feasibility

Technical feasibility

### **2.2.1 TECHNICAL FEASIBILITY**

It is reference to understand solutions that has to be provided when different types of integrated environment activities are provided so when numerous references will be targeted there should be a proper construct of communication and integration

The references that are required based on facilities that has been provided to the users will be also checked for the related technology

Detail of the integrated security formation in terms of the information will be

acknowledged that have the structuring algorithms will follow and how the related usage of the technology will help it to automate in terms of pre definition

Multiple associations that are required for the conceptualization approach will be also considered. Related environment will be better and detailed orientations of the activity will be performed for the development implementation and texting

### **2.2.2 OPERATIONAL FEASIBILITY**

First acknowledgement of features that is needed must be given to users so that intention and design can be fulfilled and user can utilize the system appropriately

In house training will be conducted with some example references so that users can understand that how to utilize the system in terms of directions and in terms of visibility. Multiple types of appropriation that are required to be generated will be checked with the help of a detailed documentation or we can say that for every function related content has to be provided to the users

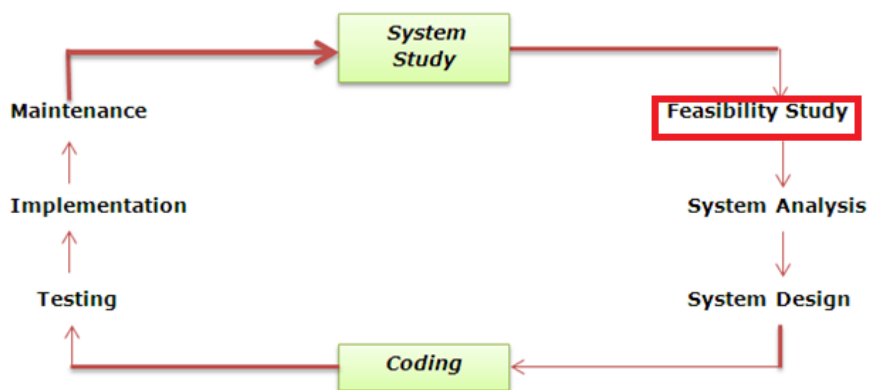


Fig-2

Feasibility undertakings are shown

### **2.2.3 ECONOMIC FEASIBILITY**

Economic considerations are important in has to be properly established because we have to undertake all types of development and implementation process is properly and all the required money should be appropriately finalized

The economic is an important aspect because the system will be on distributed feasibility and requires to be properly incorporated with all types of features. Financial acknowledgment will be determined by the financial department in all types of directed calculations will be performed.

## **2.3 TOOLS AND TECHNOLOGIES**



### **JAVA**

We are using java technology it has multiple significant advantages over the other languages and it is also different types of environment. The major references of the Java language is

It is object oriented

Platform independent so it can be easily transferred

Even the compilation the writing and debugging of the language is easier to understand

Rich API for the application development is provided and various types of communication among various activities like networking utility and database references can be properly generalized

It also supports multithreading so that several task can be organized in parallel

Distributed computing is also properly in hand with the help of Java and even the

networking references can be properly associated with secured integrations

### **SQL**

Retrieval for large amount of records can be efficiently and quickly managed

Most references of the database system can be managed without writing the substantial amount of courts

All types of standards are being adopted

Multiple data view can be structure

Supports client server architecture

More interactive in terms of getting the references

Open source and portable that provides the flexibility of usage

## **2.4 HARDWARE AND SOFTWARE REQUIREMENTS**

### **SOFTWARE REQUIREMENT**

Databases : MySQL 8.0.13

Technology :Cloud hybrid implementation

Os :Microsoft windows

Programming Used: java ,j2ee,jsp,javascript

Integrated development environment :Eclipse or Netbeans

Server Support:SSD cloud server,Amazon s3,Apache Tomcat8

### **HARDWARE REQUIREMENTS**

- Computer processor :4thgeneration intel i3 core
- Processor speed :1.7GHz
- Hard DiskSpace :500 GB

- Random Access Memory :4GB

### **3. SOFTWARE REQUIREMENT SPECIFICATION**

#### **3.1 USERS**

Administrator

Administrator will be having all the reference control which is required for various methods and observations in various kind and source incorporation within the system. Multiple categories of work references will be first half assigned by the admin in particular reference the venture would be carried out

Team members

Coworker are those category of users who are assigned by admin and they will be having limited powers by which they involve in various pursuit

##### **3.1.1 SCOPE AND OBJECTIVE**

The scope of the system is to provide the users with imposed regulations and with proper reconstruction of the information requirements they have, the system

can be utilized in any type of network consideration and provide the types of flexibility need the company has when different considerations of the work requirement arises. Quite flexible usage of the system can be undertaken by different organizations

The main objective of the system is to have detailed considerations of workability with a overruling console where the administrator can enforce different types of regulations and can divide the system for different types of Network operations and analysis

### **3.1.2 ASSUMPTION AND DEPENDENCY**

Option is to have a declaration by the administrator that only the knowledgeable peoples will be associated to the system so that they can have a differential usage and more optimized understanding of the reports provided

The dependency is associated with integrations that has to be performed by the administrator to acknowledge the types of networks and data references so that the workability can be operated

### **3.1.3 PROBLEM STATEMENT**

Problem statement in reference to the system is that multiple types of hypothesis abstraction has to be acknowledged at the same time with a defined format so a proper structuring of the information has to be first performed

Multi acknowledgement and assembly of the activities is also required to be conducted in parallel which is also associated with direct integration with the data points

## **3.2 FUNCTIONAL REQUIREMENT**

We have to notify and understand that how the system behavior and the purpose is fulfilled by the system features that are provided so each feature will be divided into different categories of processing, input requirements, trigger requirements and output requirements. Functional requirements will help us to understand features.

Extensive window generation

Use Case Name	extensive window generation
Trigger	Selective
Precondition	Admin control required
Process	<p>Selection and the extensive window generation are undertaken by the administrator where the system will provide the users with a set of proximity and according to the requirements that has to be collected.</p> <p>As the selections are defined the users will be provided with multiple independent Windows in the differential working Windows can be custom built for the provisional steps of the activities.</p> <p>Multi references will be provided for all types of abstraction which has to be associated with particular work. Even the windows can be customized and can be utilized in parallel</p>
Post-condition	Refined associations provided

#### Data and Statistics

Use Case Name	Data and Statistics
Trigger	Selective
Precondition	Authentication required
Process	<p>Data and Statistics will be generated with the magnitude of formulations that are predefined and the users are required to provide the affiliations and considerations.</p> <p>The use of consideration accordingly the system will generate information and will be provided with different types of typecast and each and every type cast</p>

	came modified for the given for the understanding. Multiple references of a matrix is utilized in different types of algorithms are inbuilt so that structuring can be properly associated in real time
Post-condition	Draft generation

### Divisional report

Use Case Name	divisional report
Trigger	Selective
Precondition	Authentication and integration required
Process	For considering the services with more automation formats different types of categories and divisional report is provided where the users are required to draught the needed vicinity and accordingly the information will be updated. For considering the automation the triggers are required to be set with all formations of generations conversions and gathering requirements based on which the reports will be design
Post-condition	Report settings

### Network system

Use Case Name	network system
Trigger	Settings



Precondition	Admin control
Process	<p>Elaboration of the utilities and summarized encapsulated network system will be provided in the form of settings so the users will be having a defined way through which different types of network data points can be added and accordingly the related techniques can be implemented.</p> <p>The settings will provide all adequate references which are needed to make the work easy in according Di the integrated work can be performed.</p>
Post-condition	Compatibility and settings

#### Data point operations

Use Case Name	Data point operations
Trigger	Settings and inputs
Precondition	Authentication required
Process	<p>Data point operations can be performed with all types of supervision and control which is needed to be defined so the users will be asked for different types of operations based on the identities of the network and accordingly the setups are required to be performed.</p> <p>Settings in accessibilities provide the integrated workability will be provided to the users and even it will be associated in a collaborated formation.</p> <p>Integration can be controlled from Central location with helpful for the proper navigation</p>

Post-condition	Operations performed
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### **3.3 NON-FUNCTIONAL REQUIREMENT**

Real time Association all types of possibilities has to be properly acknowledged because we are providing the system to the users for different considerations of usage so first we will check that what type of nonfunctional perception may arrive for example the security associations which are needed, the knowledge of the workability that is needed, associated considerations for the collaborations and other formations of usability

#### **USABILITY**

The system will be used in different considerations of dominations or we can say that the system can be utilized for different types of workability which can be the business Matrix Retriever, different formations of network enhancement analysis and other provisions of direct network controls. Multiple types of usability is associated on single system which can be referenced as required

#### **DOCUMENTATIONS**

Related documentations will be provided because we want that fan multiple Windows with different structuring of the formulated features are provided to the users even the user should be having detail understandability. Multiple examples and integrated scenario screenshot will be provided to the users so that they can have a detailed acknowledgement of the word understanding.

#### **ROBUST**

The system provides multiple types of working references so we require that each reference should be properly formulated by the users so any type of wrong perception will be notified to the uses by the system in real time

#### **LEGAL**

Legal associations will be properly defined because the system will have the integration on different types of network platform and even the referential information will be fetched and will be outlined for the discussions so a proper reference of legal after usage should be provided. Details will be listed and accordingly the users will be notified.

### **SECURITY**

The security considerations are important to be achieved because the perfection is that are included should be properly shielded because it will be based on integrated working and it will be based on different types of reports so different types of transfer encryption algorithms and various types of accessibility formulations are associated with the system.

## 4. SYSTEM DESIGN

### 4.1 SYSTEM PERSPECTIVE

Shows structure of component interrelationships and the principles so that reflection understanding how the system working can be achieved

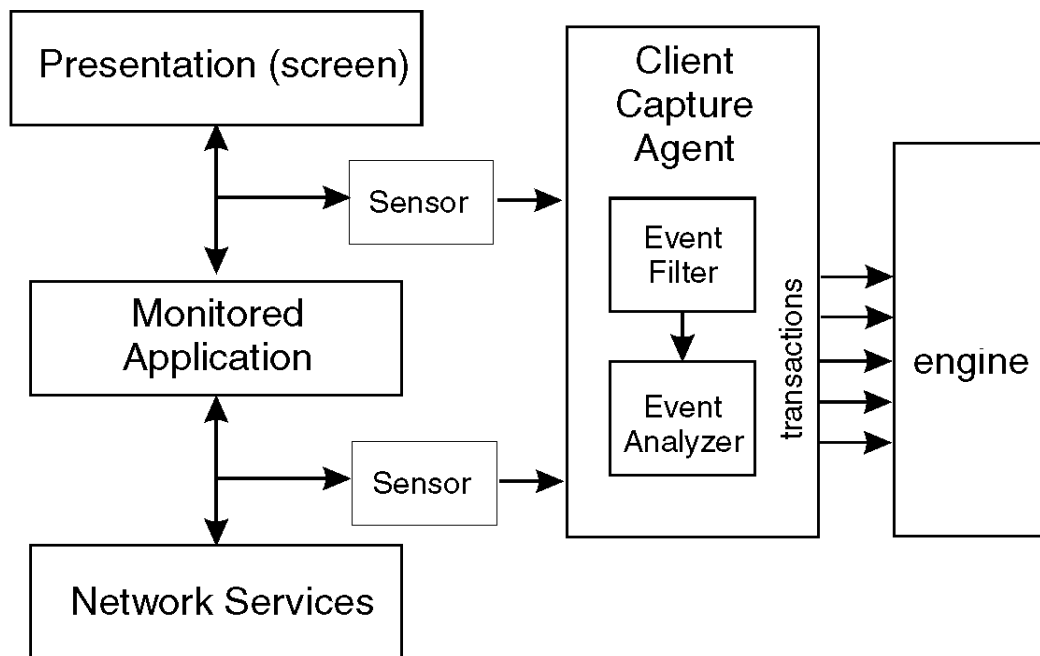


Figure 4.1.1 Architecture diagram

## 4.2 CONTEXT DIAGRAM

Context diagram provides multiple sequence of synchronization of processes where all types of frontiers and extent of the peek of system is shown

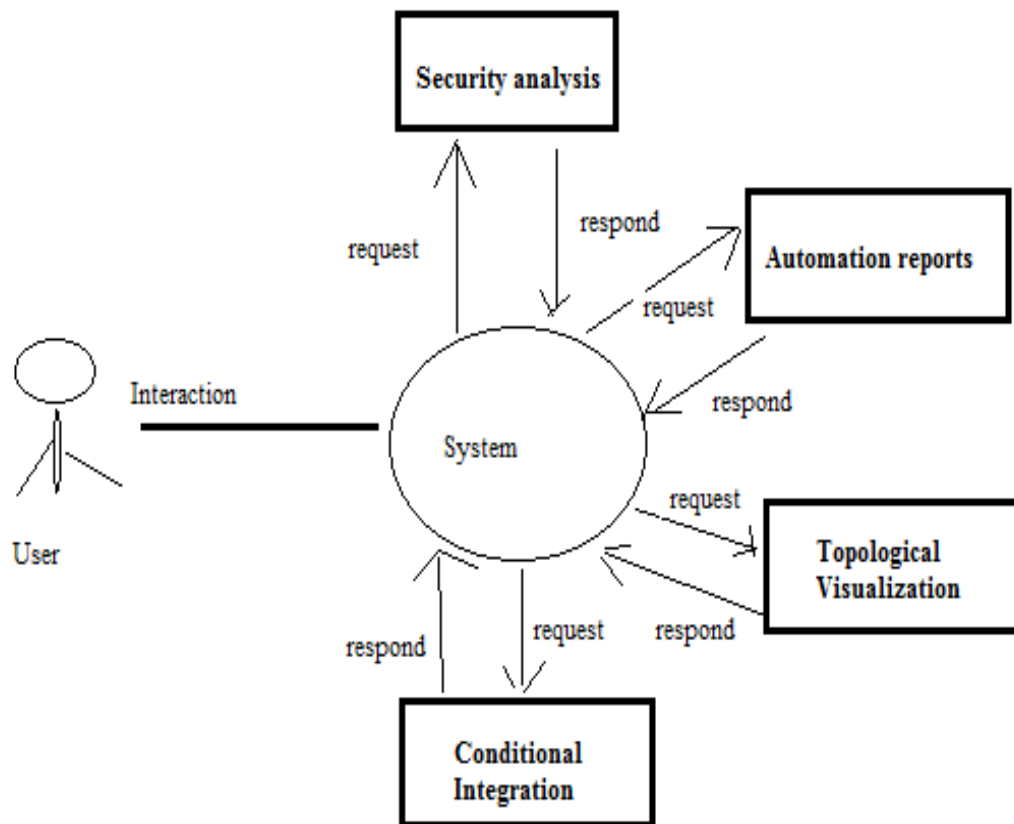
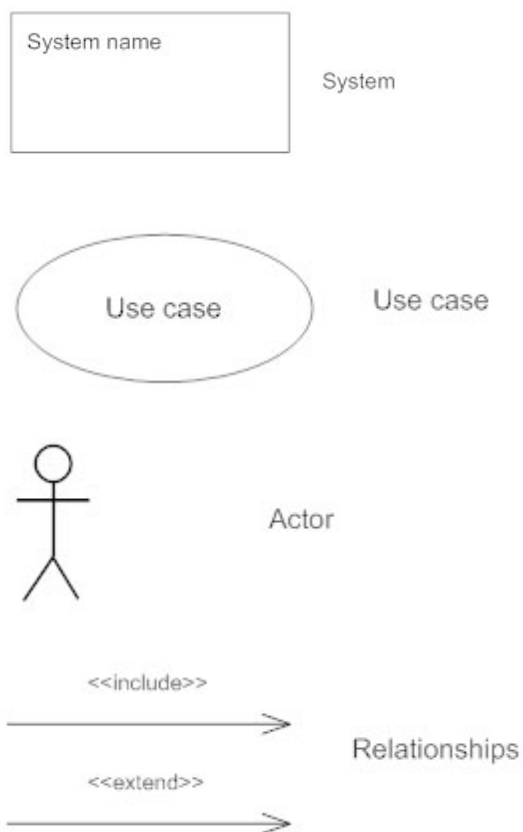


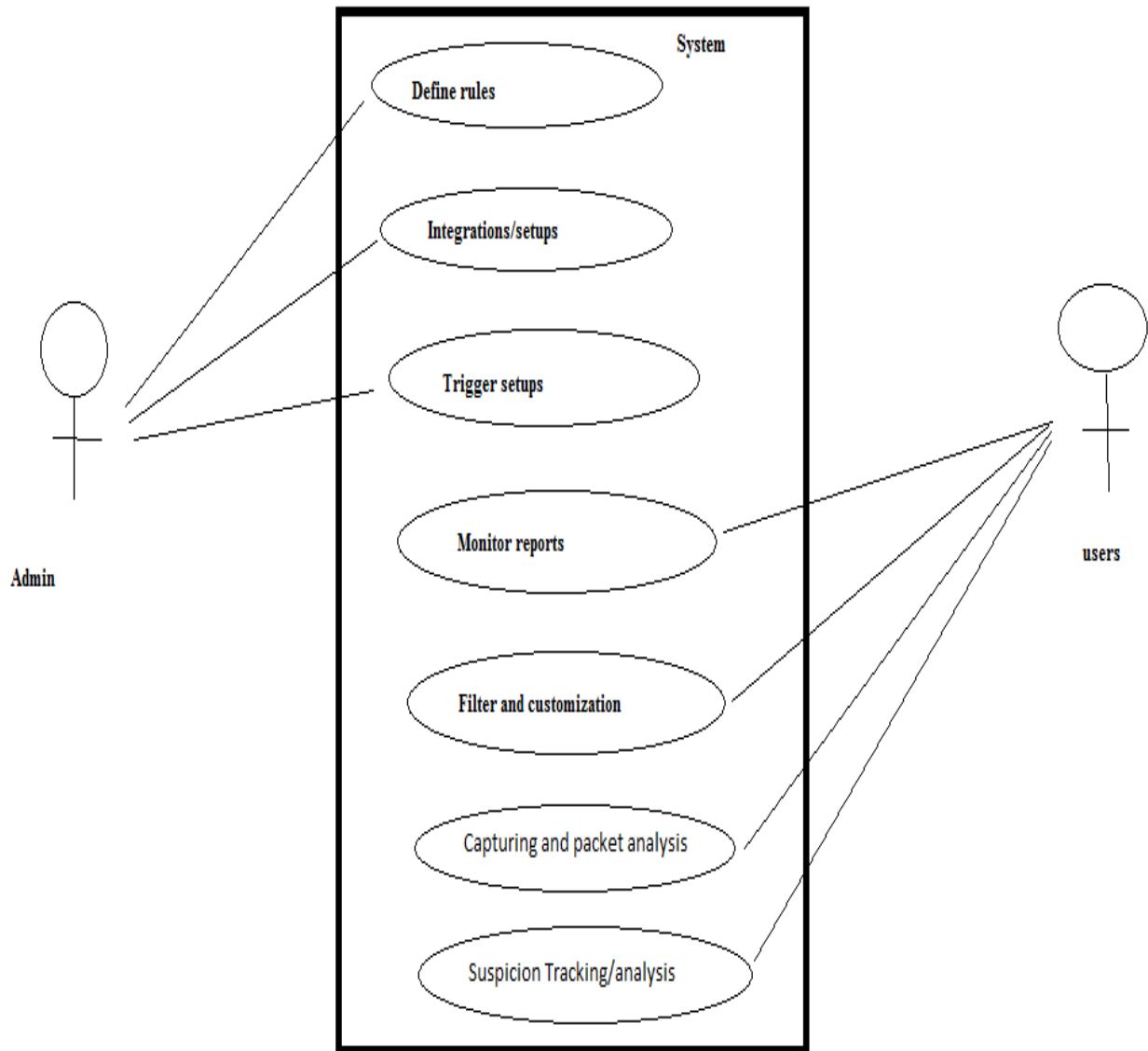
Figure 4.2.1 Context diagram

## 5.DETAILED DESIGN

### 5.1 USE CASE DIAGRAM

All related actors and the related processes that will be undertaken for achieving a goal is being acknowledged in the use case diagram

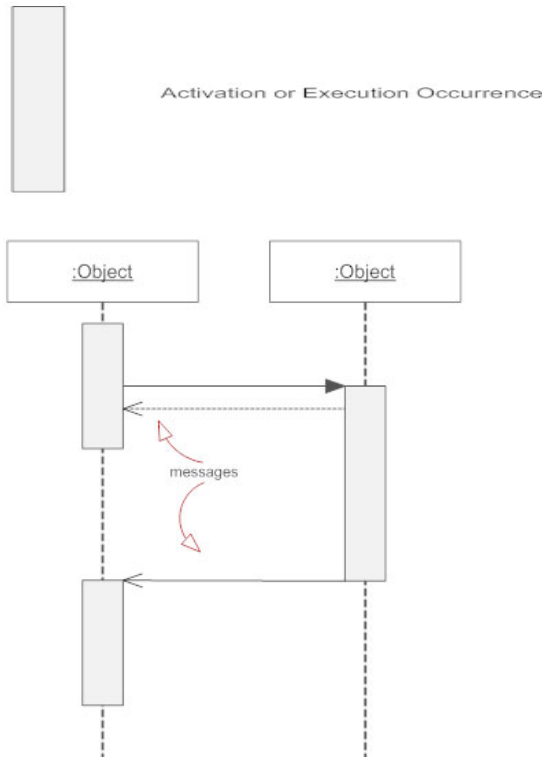




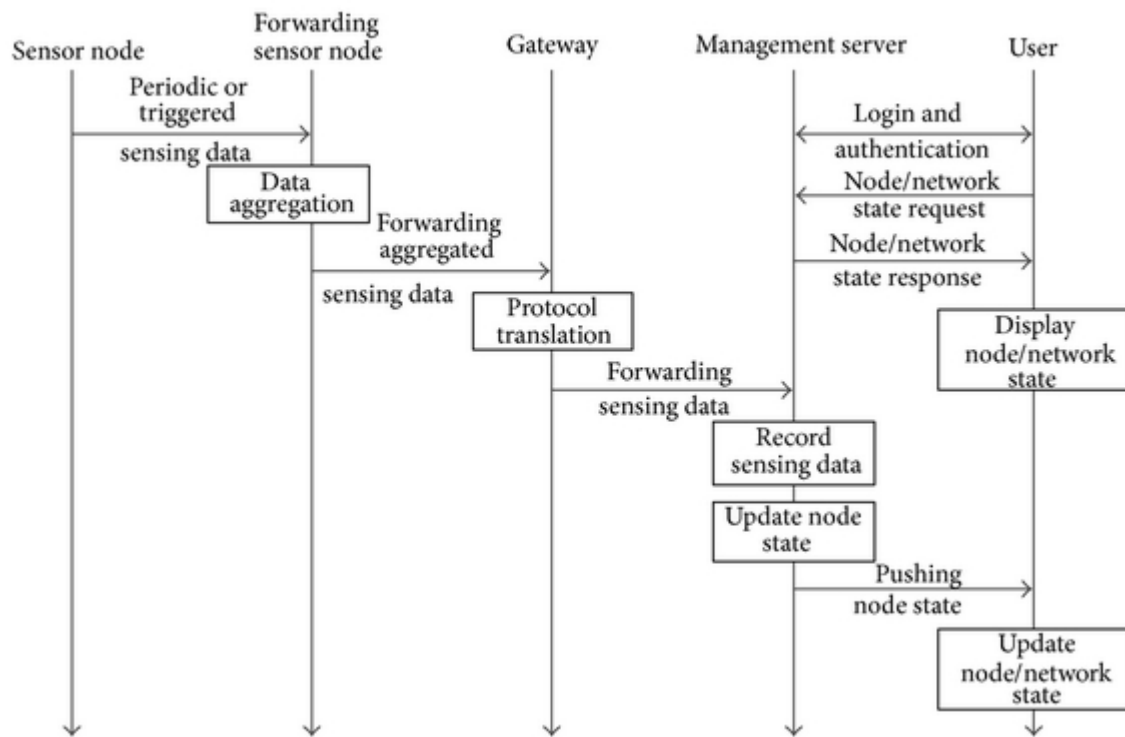
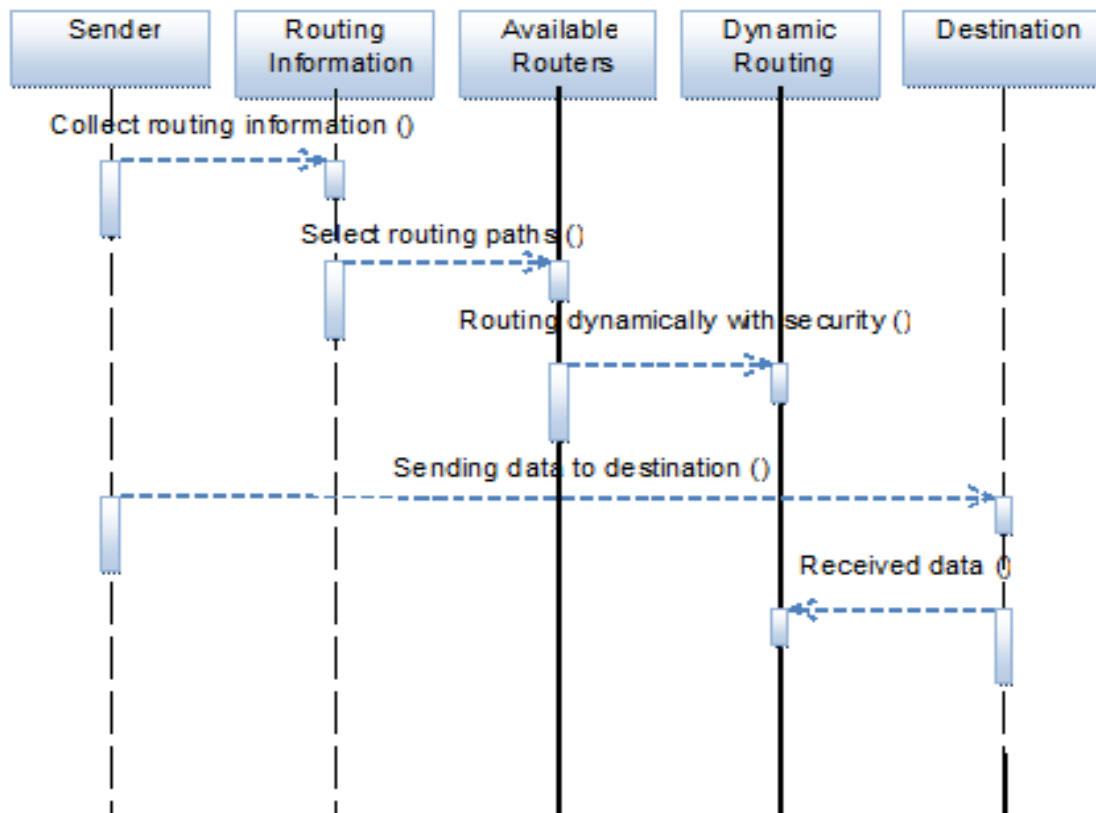
5.1.1 Use Case figure

## 5.2 SEQUENCE DIAGRAM

It represents individual use cases where external actors and the related messages that are invoked will be shown

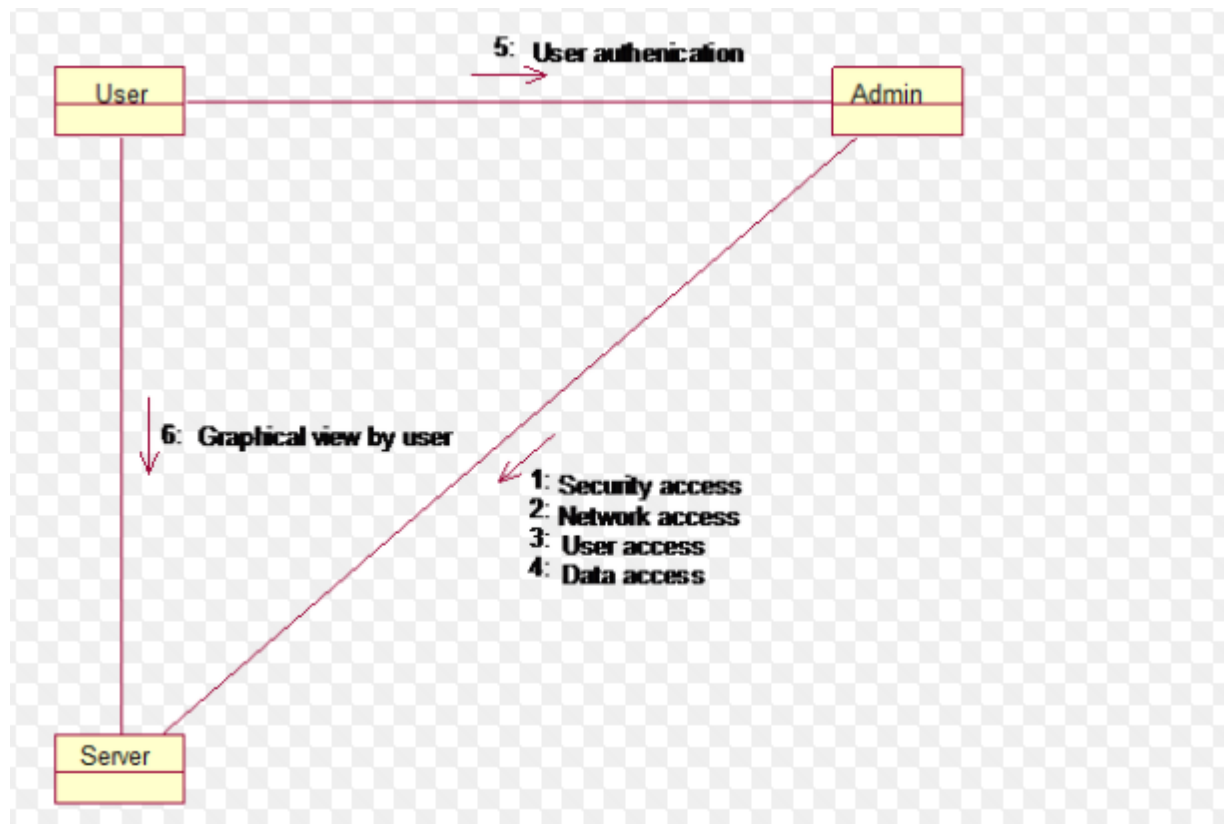




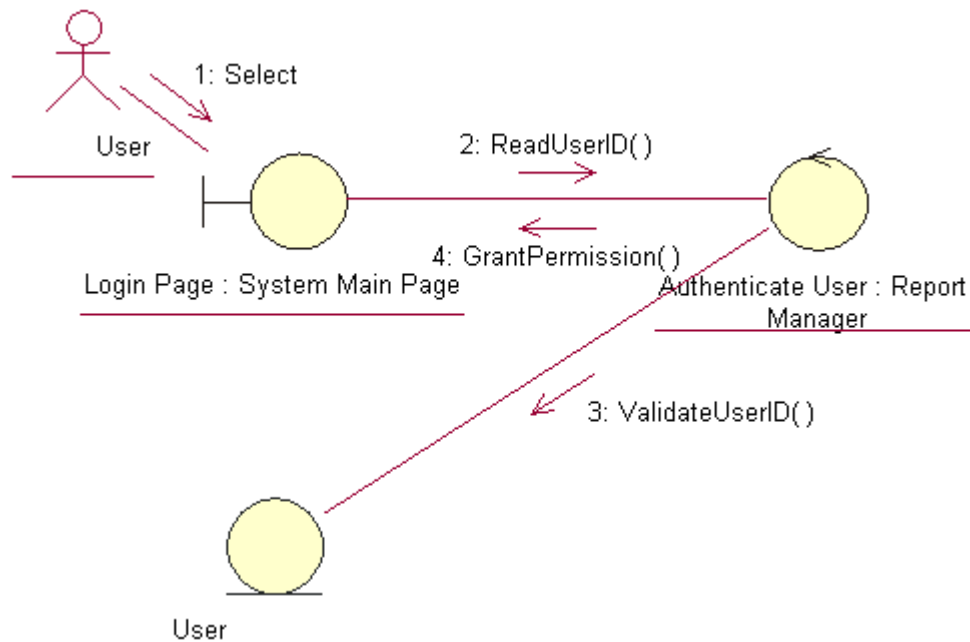


5.2.1 Sequence figure

### 5.3 COLLABORATION DIAGRAM



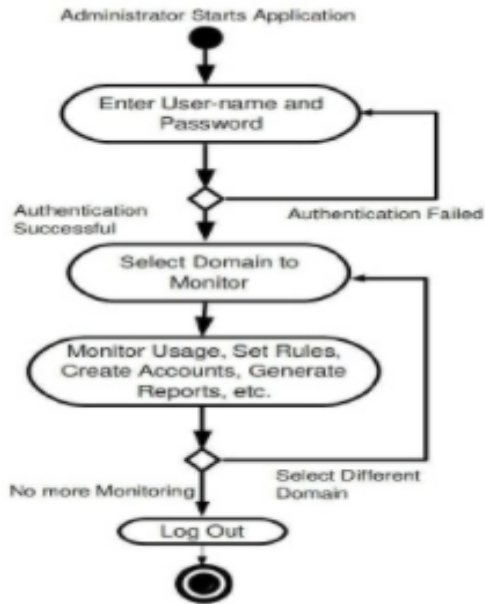
Collaboration diagram



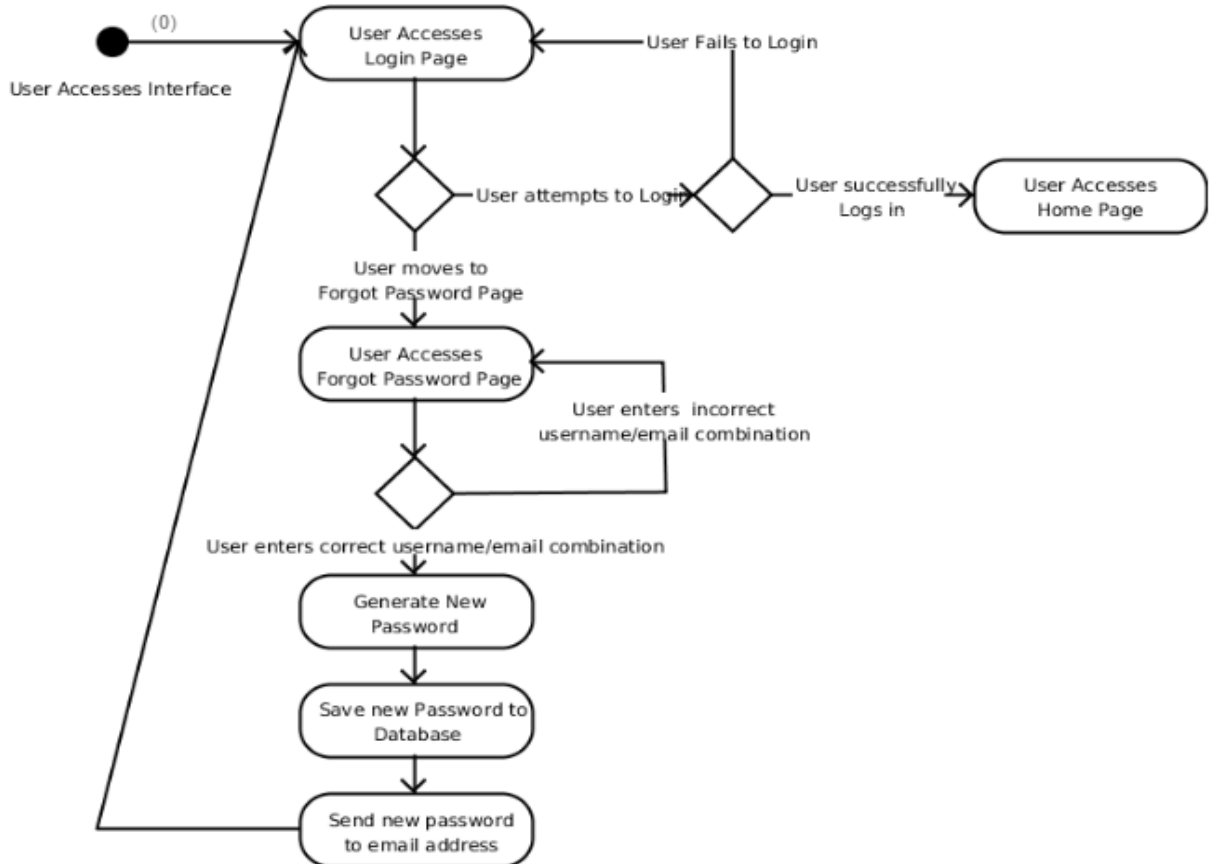
5.3.1 Collaboration figure

### 5.4 ACTIVITY DIAGRAM

It shows dynamic behavior and shows how gliding of information happens.



Activity diagram

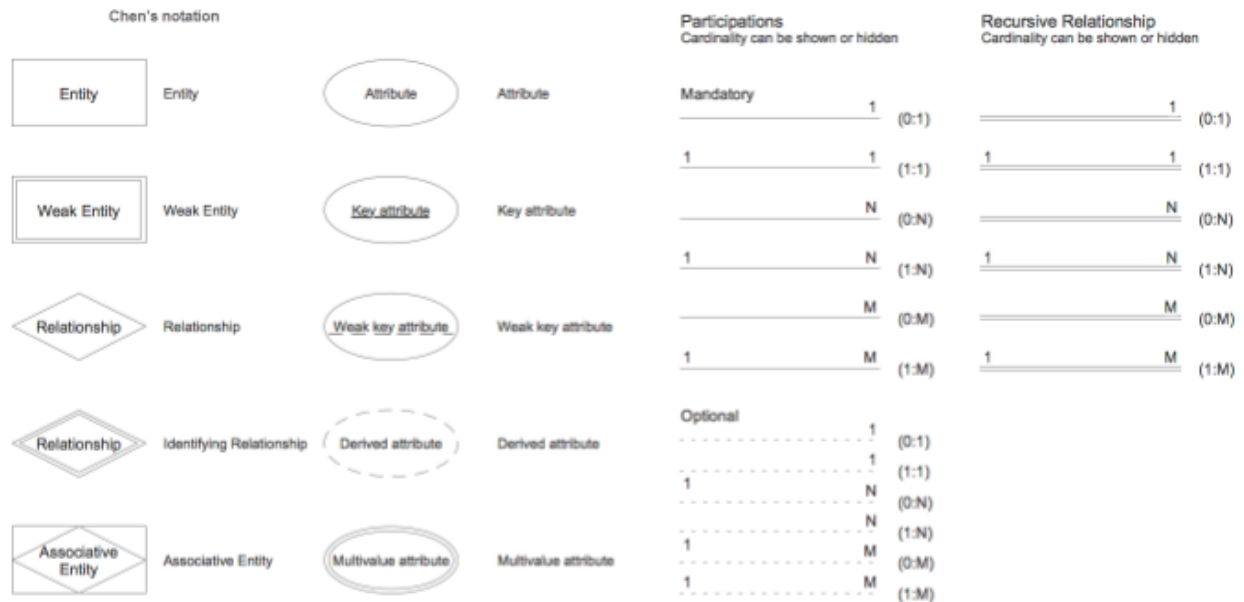


5.4.1 Activity figure

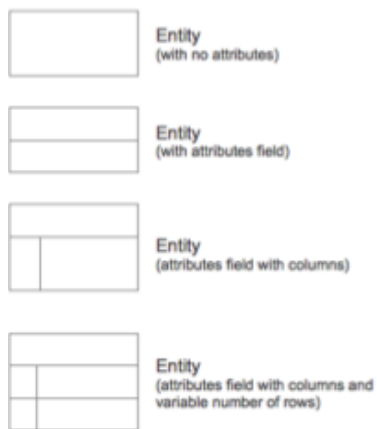
## 5.5 DATABASE DESIGN

### Entity relationship model

Entity model helps us to understand the related entities and all types of related modeling based on the relationships and attributes will be performed



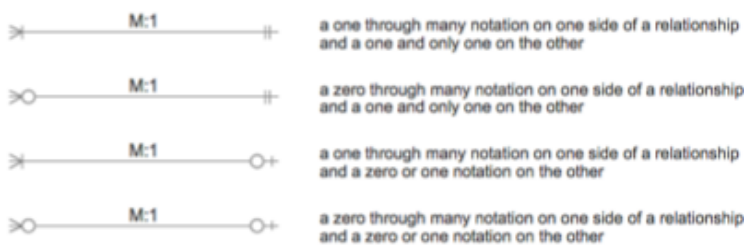
Crow's Foot notation



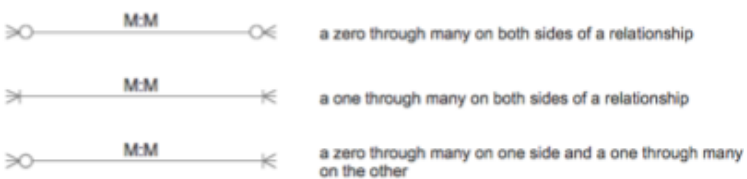
Relationships  
(Cardinality and Modality)



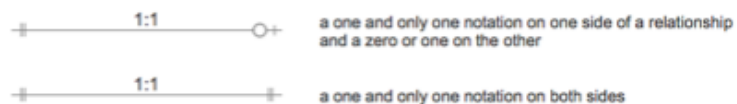
Many - to - One

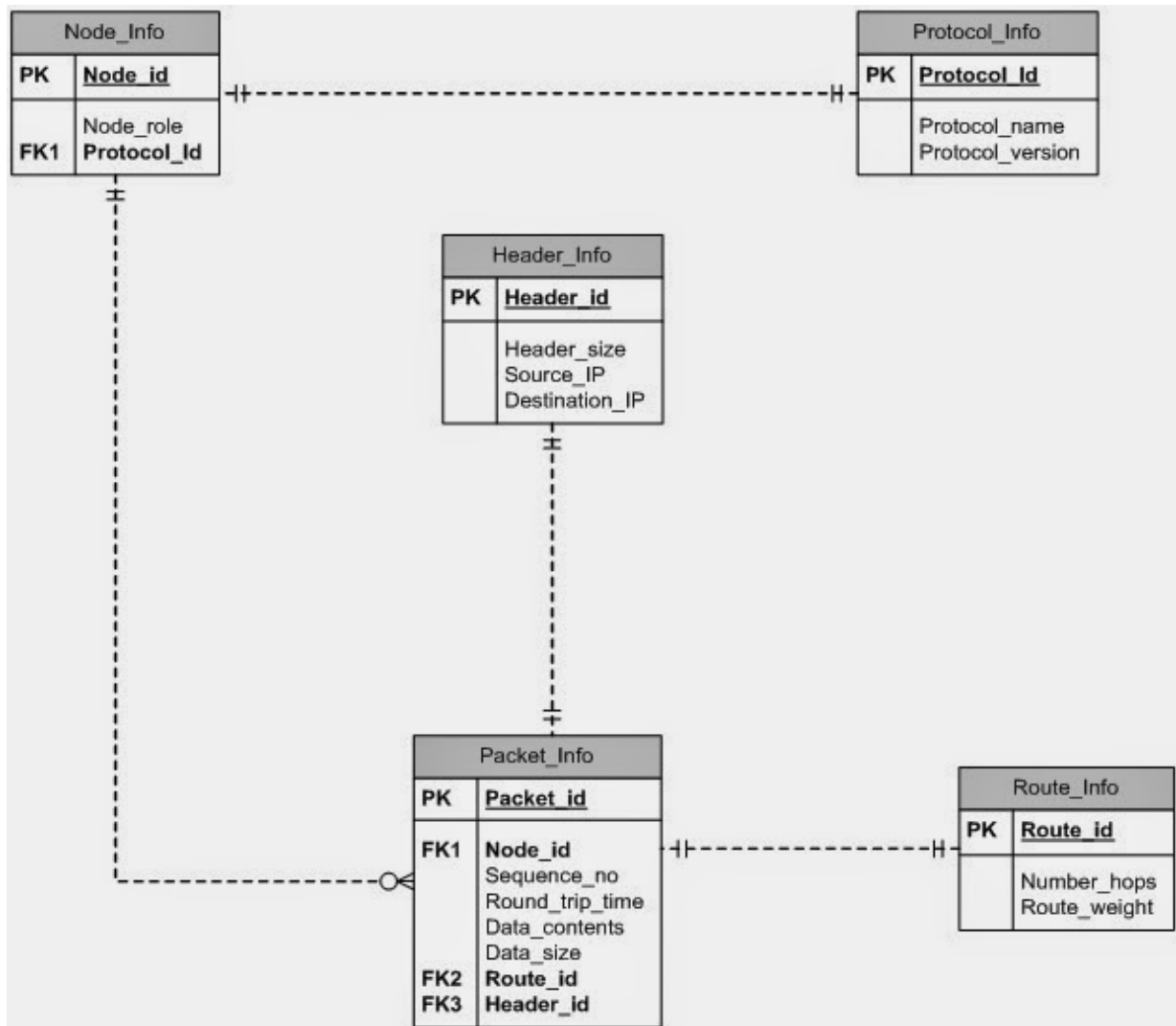


Many-to-Many



Many-to-Many

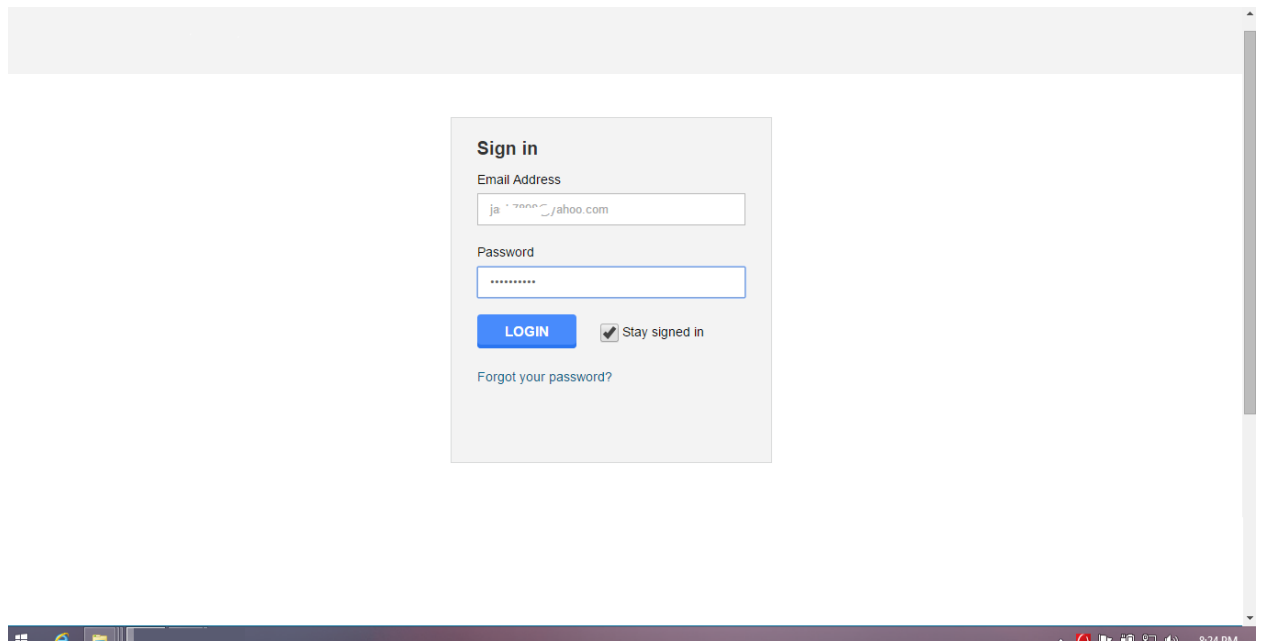




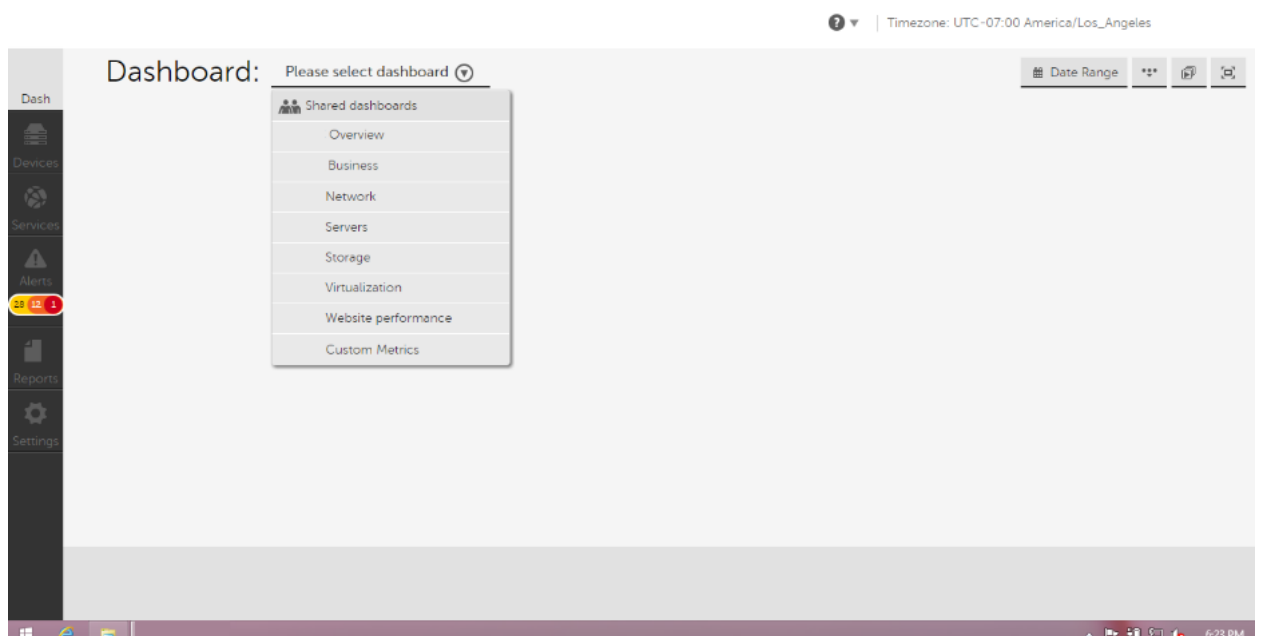
5.5.1 ER figure

## 6. IMPLEMENTATION

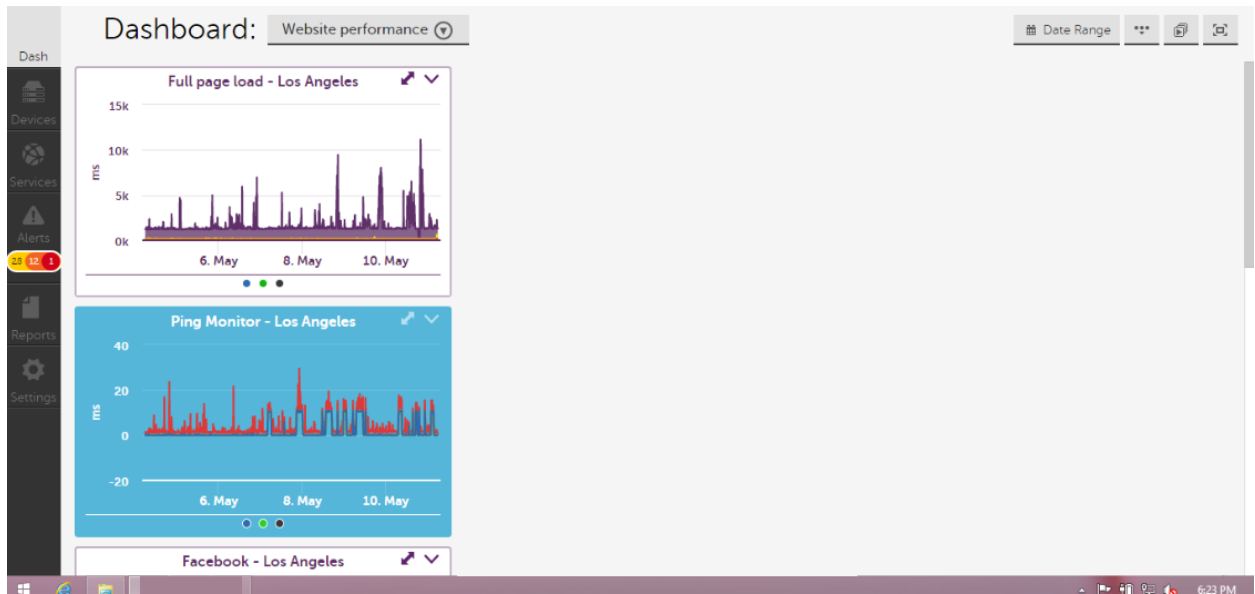
### 6.1 SCREEN SHOTS



#### Loginpage Admin



## Dashboard showing different working considerations



## Performance charts shown with custom options

The dashboard displays network performance metrics. It features two main sections:

### Device Top Applications

Description	IP	Protocol	Port	% Usage	Usage	Sent	Received	Flows	Active Time	# Clients
10.36.13.250	10.36.13.250	udp	161	23.47%	1.84M	1930611	0	4	24 hours	1
10.36.13.117	10.36.13.117	other	0	22.17%	1.74M	0	1824000	1425	24 hours	1
10.36.13.250	10.36.13.250	other	2048	22.17%	1.74M	1824000	0	1425	24 hours	1
10.36.13.117	10.36.13.117	udp	44333	8.25%	662.77K	0	678676	1	8 hours	1
10.36.13.117	10.36.13.117	udp	48810	7.80%	626.64K	0	641676	1	8 hours	1

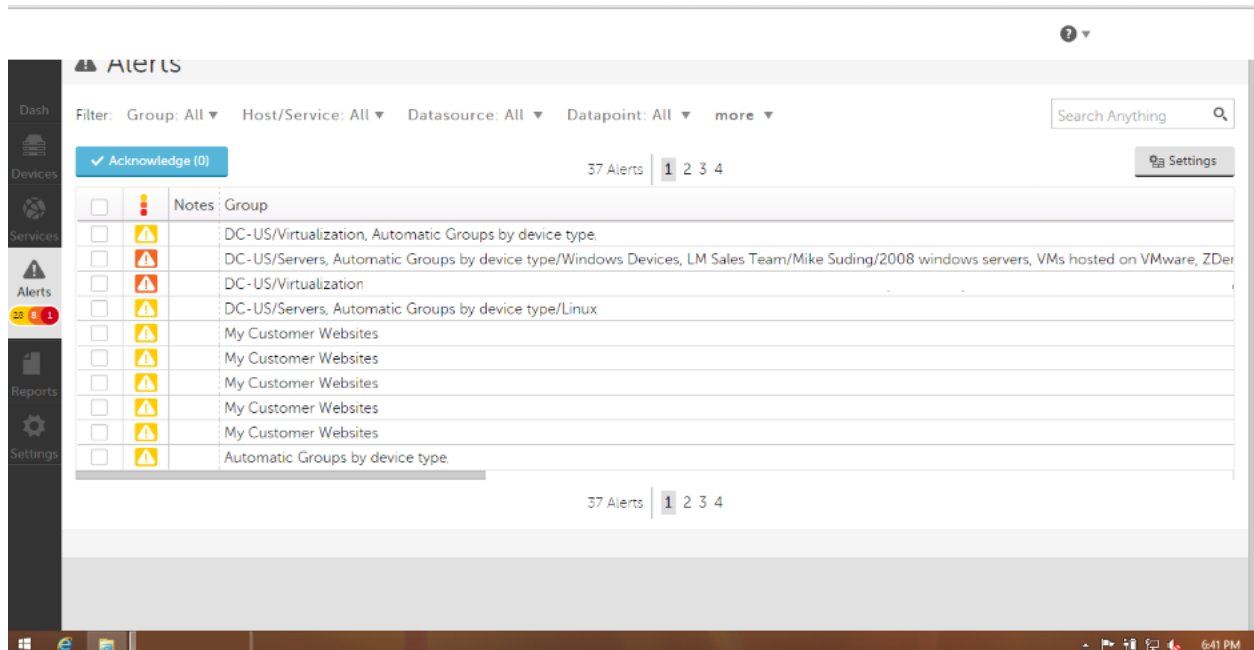
### Network Overview

Name	Description
Customer 2/By Type/Network	no alert
DC-US/Network	3 warning alerts
Network/Firewalls	no alert
Network/Load Balancers	2 warning alerts
Network	no alert

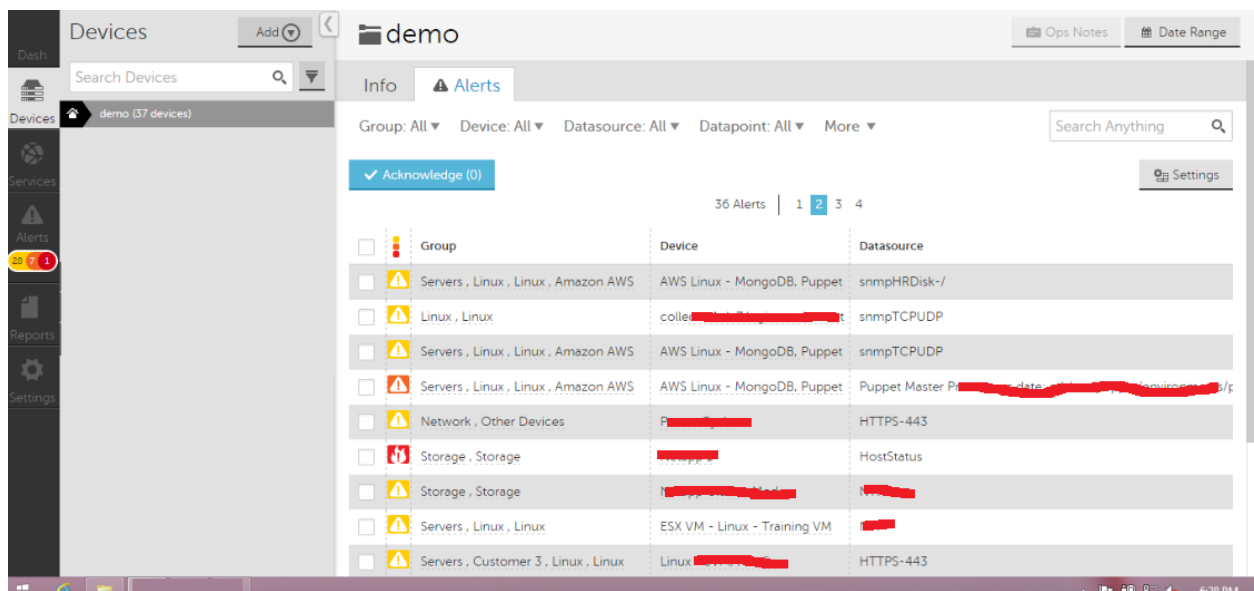
Additional sections visible at the bottom include 'Top 10 interfaces by total bandwidth' and 'Switch CPU'.

## Details of network shown with scan identities





Alerts with different data points shown



Detail scan details shown

The screenshot shows the Nagios XI Alerts page for a 'demo' environment. The left sidebar contains navigation options: Dash, Devices, Services, Alerts (with a notification badge), Reports, and Settings. The main content area displays a table of alerts with the following columns: Group, Service, Value, and Began. There are 6 alerts listed, all with a yellow warning icon and a checkbox for acknowledgment.

<input type="checkbox"/>		Group	Service	Value	Began
<input type="checkbox"/>		My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:14
<input type="checkbox"/>		My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:13
<input type="checkbox"/>		My Customer Websites	Example Down Customer	Service Error	16:09:52
<input type="checkbox"/>		My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:14
<input type="checkbox"/>		My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:14
<input type="checkbox"/>		My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:15

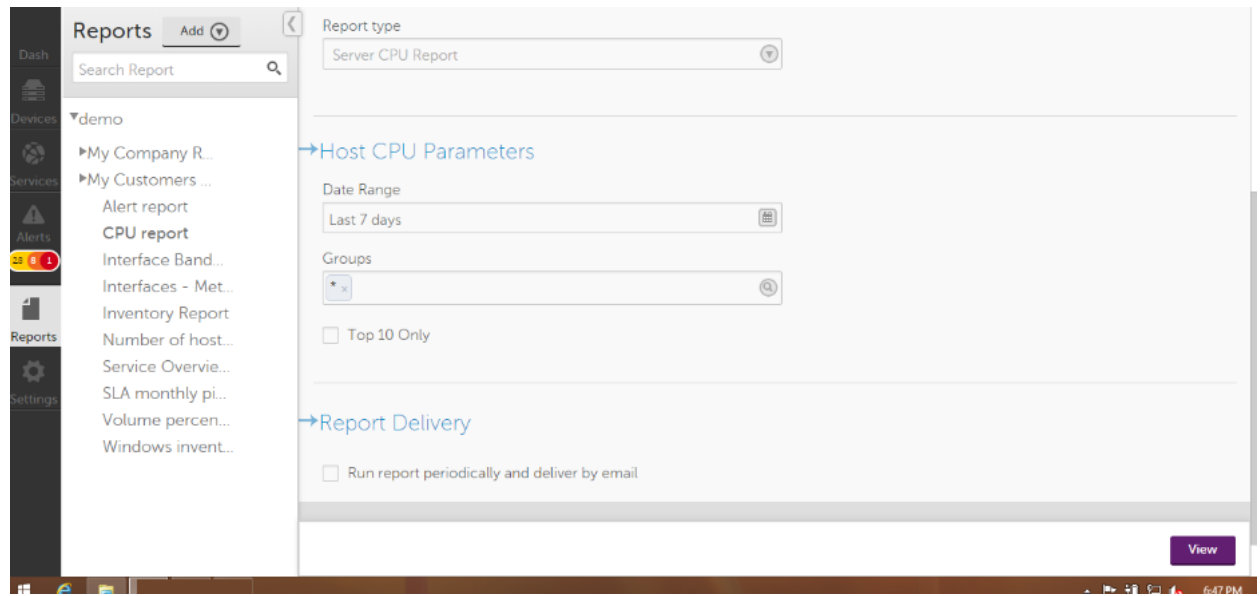
Service details shown

The screenshot shows the Nagios XI Reports page for a 'demo' environment. The left sidebar contains navigation options: Dash, Devices, Services, Alerts (with a notification badge), Reports, and Settings. The main content area displays the configuration for a report, including a date range of 'Last 2 hours', host selection options, report format, and delivery settings.

**Report Delivery**

- Run report periodically and deliver by email
- Schedule: Every  day  week  month
- At: 03:00 pm
- Recipients: steve

Reference reports can be automated



Another report setup shown

Server CPU Usage report

COMPANY demo		Min(%)	Max(%)	Average(%)
DESCRIPTION				
HOST	DESCRIPTION			
Vcenter		28.05	47.51	32.66
ESX Host 5		28.59	48.39	32.49
ESX Host 3		21.21	28.06	23.57
Vcenter		20.81	27.35	23.53
win2012-2		8.25	22.04	15.12
ESX VM - Win 2008 R2 - Exchange, IIS, MSSQL, UNC		9.76	37.67	11.16
Vcenter		8.48	14.45	10.48
Vcenter		8.62	11.80	10.14
Vcenter		3.42	12.58	6.00
ESX Host 2		3.41	12.70	5.98
Vcenter		4.56	10.37	5.86
Domain Controller - Win 2008 R2 - AD, DNS, IIS, WinRM, UNC		1.70	7.05	2.88
Vcenter		1.35	4.13	2.35
ESX VM - Win 2008 R2 - Exchange, IIS		1.01	19.99	1.34
Win2012-1		0.42	47.41	1.34
Hypervisor		0.59	2.42	0.82

Converted report shown

## 7. SOFTWARE TESTING

Involved in the development of the system

Software testing is a way to acknowledge the uniform working that is associated with the system so we have to check that all considerable compatibility and the related window based analysis and workability is properly provided. We will be checking all types of consideration with elaborated references of condition because different types of technological conditions and integrations may arise in the real time. Software testing will be performed with the help of different types of users are associated with the project.

All types of associations will be properly defined and even the workability that is associated with software testing will be properly established because we have to acknowledge that work consideration for properly refined. Multiple types of provisions are required to be checked because we want that a proper accessibility and acceptance should be acknowledged. Software testing is important and this will help us to understand that the faces and the governance that is provided within the system works properly and according to the objective and purpose of the system. The testing perception for different types of information routing that will be done through the system will be checked for the accuracy because we have to test each and every and government integration and the reference of the design that it will provide with the help of different types of optical reports. All information references which will be converted in terms of automated report generation will be also tested for the reliability.

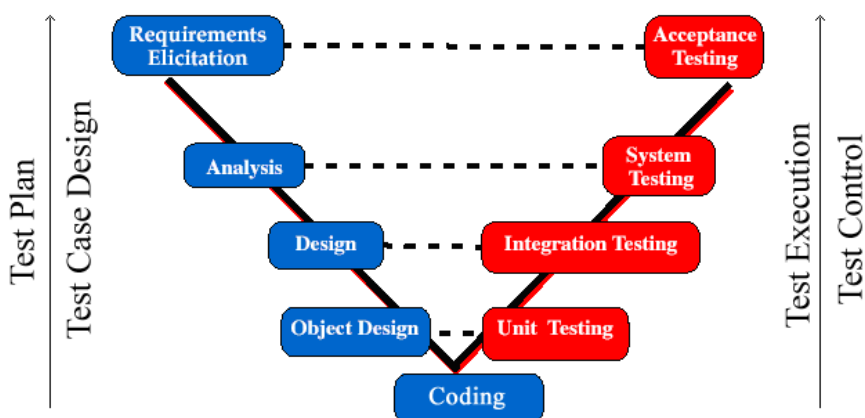


Fig-3

Testing considerations undertaken is shown

### **UNIT TESTING**

We will be performing the unit test reference because we will be checking the proclamation workability references by the individual unit

Data references will be checked for the accuracy and we have to check that each consideration that is provided within the system works properly and provides the influential position understanding

All the reference of conversions will be also be checked because we want that conditional references of the modification that will be input by the users should be properly defined

We will be also checking the references of multi window working because we want that parallel window waste working should be providing all types of perceptual approach and statistic refinement properly

Multiple types of statistics that will be provided will be also check for the individual consideration because different references of Windows will be selected in each consideration of statistics is different and should be provided with different types of optic structure to the users

Considerations of the Automations and the intended summarization and integration for the transfer will be also checked

### **AUTOMATION TESTING**

Automation Testing is important to have a low resistance investment to perform more critical check. Automation Testing will be done with help of multiple testcases that are written because different conditions that are verified in various variations so we will acknowledge first structure of what have to be checked and inclusive scenario based checking will be done by the software we will be using the Selenium software for automation testing

**TEST CASES**

No	Test	Test Input	Expected	Actual	Test Status	Severity
1	Admin login	Details of login provided	Login success	Conditional reference and setups provided	Pass	Major
2	Page reference and additions	Selective	Defined pages and setups provided	Defined rules can be added	Pass	Critical
3	Parallel	Settings	Parallel pages added	Defined parallel reference provided	Pass	Critical
4	Scale-networks	Settings	Should structure as standard	Networks added	Pass	Critical
5	Reports	Selective	Regulations to be followed	Different report generation considerations added	Pass	Critical

6	Graphs	Select to convert	Conversion options provided	Details added	Pass	Critical
7	Auto-reports	Settings	Defined rules added	Applicable	Pass	Critical
8	Notifications	Auto	Updates	Synchronization with alerts provided	Pass	Critical
9	Operations	Selection	Operations can be setups with access control	Added and defined	Pass	Critical

## **8. CONCLUSION**

We can conclude that all major steps that are required to carry out different types of distinct in network activities are provided within the system and as we have checked all types of considerations we found that it is more appropriate that the system can be utilized on a larger consideration. Multiple types of activity considerations are associated on the same time and we found that for each reference of activity proper provided proficiency was provided. Types of Windows were divided and it was put in synchronization so that all types of activity considerations can be properly accomplished in real time reference.

Associated the correctness of the information that is provided as we found that intended design formations were provided and all these intended design formations are based on multiple components that has structured in a predefined format. Multiple types of information references were generated and we have acknowledged that system provides the robust working and every type of related combinations of the regulations that are incorporated works properly. We have established the integrated working onto the identities and we found that reference work is properly generalized. The system is considered to be a place where the uses will be having a flexible reference of working and this will be done with more optimized consideration so each and every option that is provided the system will be properly generalized and will be provided for integrated working so be checked all types of reference work in parallel and we found that optimal working can be achieved.



## **9. FUTURE ENHANCEMENTS**

Future enhancement is referenced to enforce new needs in future. Different methods that references will be established to know that what issues industries are facing. How new features can be included. Some of important links can be linked are listed as following -

The technique of retrieval that is provided can be more elaborated by using formula implementation options and by various types and generation optics options

The cogitation which have provided with regarding integrations been provided by a pop ups

More alert notification system along with similar settings can be added in system

## APPENDIX A

### Java

#### **BIBLIOGRAPHY**

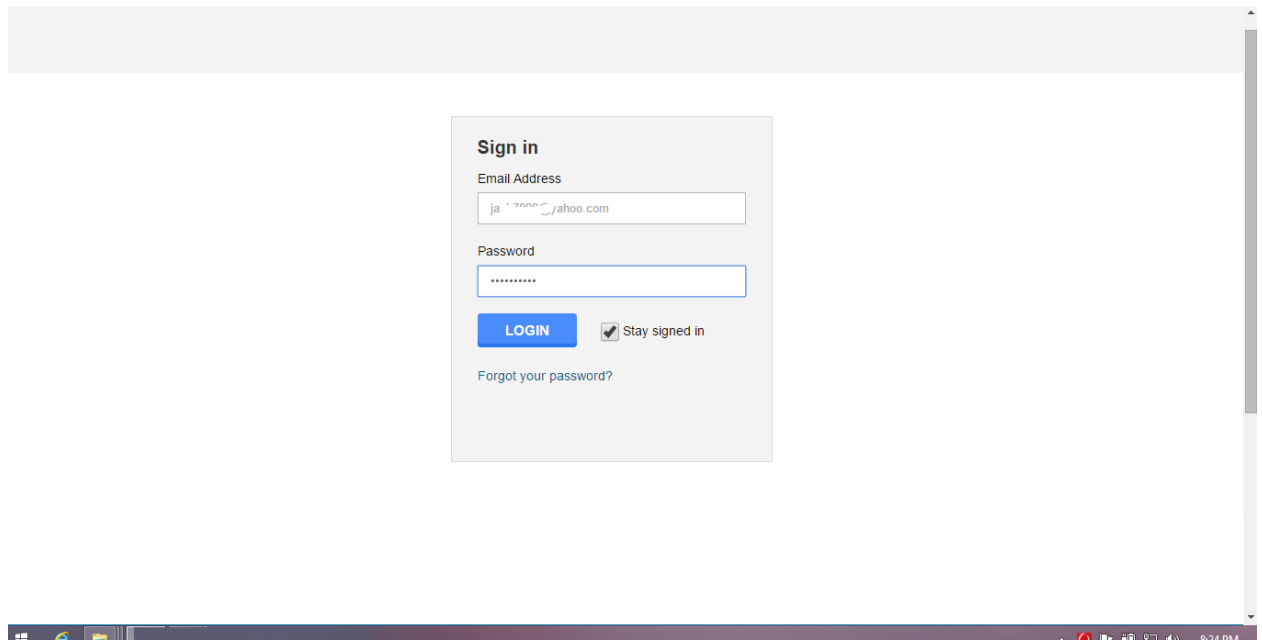
- "The Arrival of Oracle ,Java14.Regained 17th March 2020.
- "Andrew{May 20.2015}.Binstock. "2 decades of upheaval Java".March 18, 2016.

#### Web referrals-

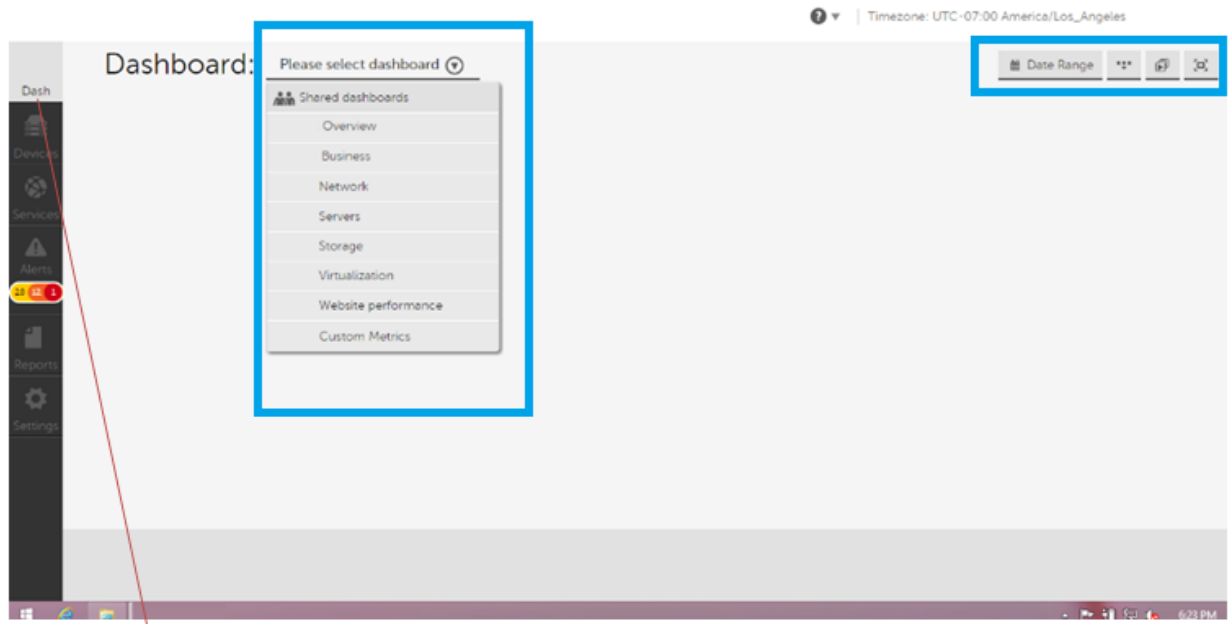
- [www.wikipedia.com](http://www.wikipedia.com)
- [www.scribd.com](http://www.scribd.com)
- [www.microsoft.com](http://www.microsoft.com)
- [www.google.com](http://www.google.com)

## APPENDIX B

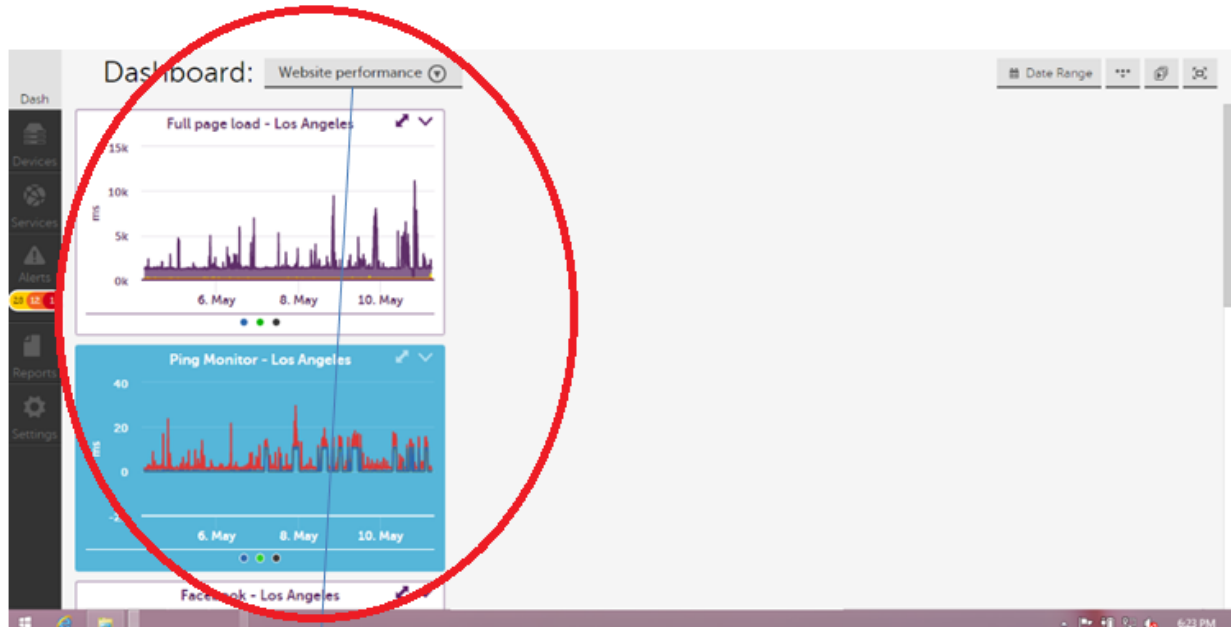
### USER MANUAL



Admin Login page



Dashboard showing different working considerations



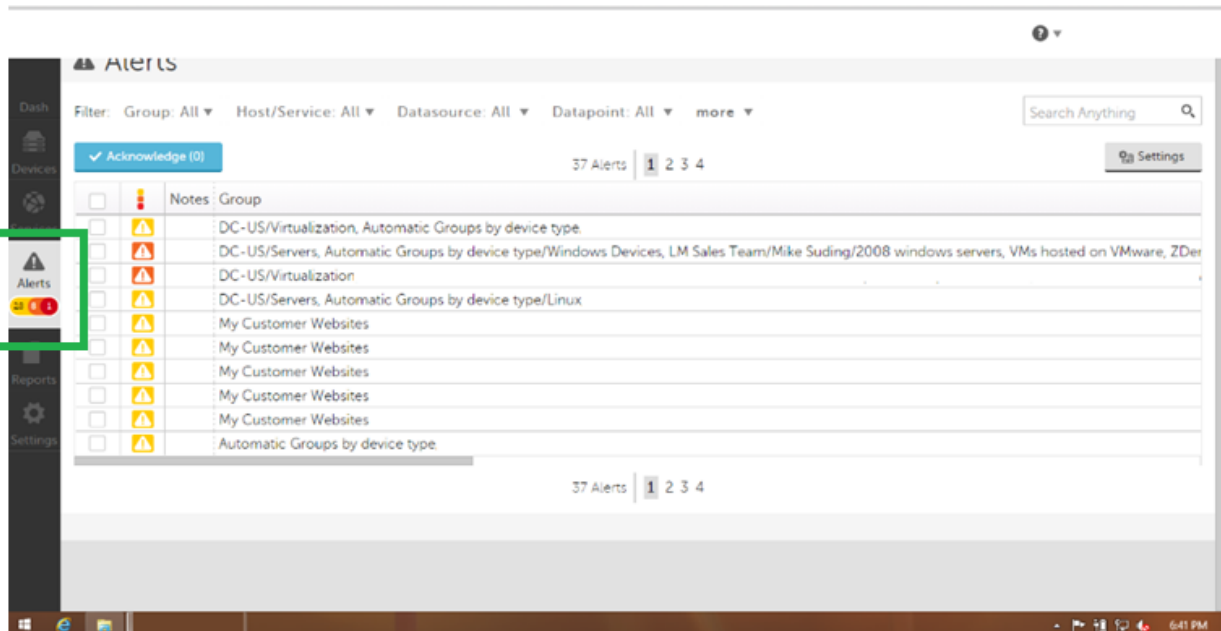
Performance charts shown with custom options

The screenshot shows a dashboard titled 'Dashboard: Network'. It features a table titled 'Device Top Applications' and a table titled 'Network Overview'. The 'Device Top Applications' table has columns: Description, IP, Protocol, Port, % Usage, Usage, Sent, Received, Flows, Active Time, and # Clients. The 'Network Overview' table has columns: Name and Description. Red boxes highlight the 'Network' tab, the 'Device Top Applications' table, and the 'Network Overview' table.

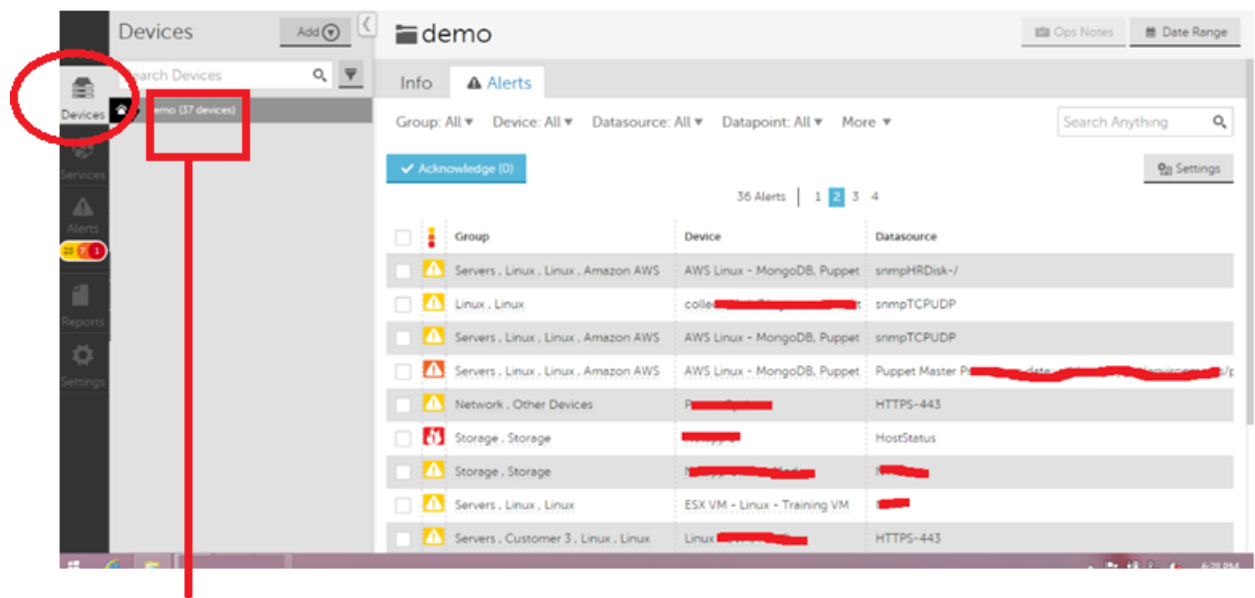
Description	IP	Protocol	Port	% Usage	Usage	Sent	Received	Flows	Active Time	# Clients
10.36.13.250	10.36.13.250	udp	161	23.47%	1.84M	1930611	0	4	24 hours	1
10.36.13.117	10.36.13.117	other	0	22.17%	1.74M	0	1824000	1425	24 hours	1
10.36.13.250	10.36.13.250	other	2048	22.17%	1.74M	1824000	0	1425	24 hours	1
10.36.13.117	10.36.13.117	udp	44333	8.25%	662.77K	0	678676	1	8 hours	1
10.36.13.117	10.36.13.117	udp	48810	7.80%	626.64K	0	641676	1	8 hours	1

Name	Description
Customer 2/By Type/Network	no alert
DC-US/Network	3 warning alerts
Network/Firewalls	no alert
Network/Load Balancers	2 warning alerts
Network	no alert

Details of network shown with scan identities



Alerts with different data points shown



Detail scan details shown

The screenshot shows the 'Services' page in a monitoring dashboard. The left sidebar has a 'Services' menu item circled in green. The main content area displays a 'demo' service with 6 alerts. A table of alerts is highlighted with a green border.

<input type="checkbox"/>	<input type="checkbox"/>	Group	Service	Value	Began
<input type="checkbox"/>	<input type="checkbox"/>	My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:14
<input type="checkbox"/>	<input type="checkbox"/>	My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:13
<input type="checkbox"/>	<input type="checkbox"/>	My Customer Websites	Example Down Customer	Service Error	16:09:52
<input type="checkbox"/>	<input type="checkbox"/>	My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:14
<input type="checkbox"/>	<input type="checkbox"/>	My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:14
<input type="checkbox"/>	<input type="checkbox"/>	My Customer Websites	Example Down Customer	HTTP status code unexpected	19:15:15

Service details shown

The screenshot shows the 'Reports' page in a monitoring dashboard. The left sidebar has a 'Reports' menu item highlighted. The main content area displays the 'Report Delivery' settings panel, which is highlighted with a green border.

**Date Range**  
Last 2 hours

**Host:**  by Host Groups  by Hosts  
Automatic Groups by device type/Windows Devices

**Report format**  
 Text only  Graph per Interface

**Report Delivery**

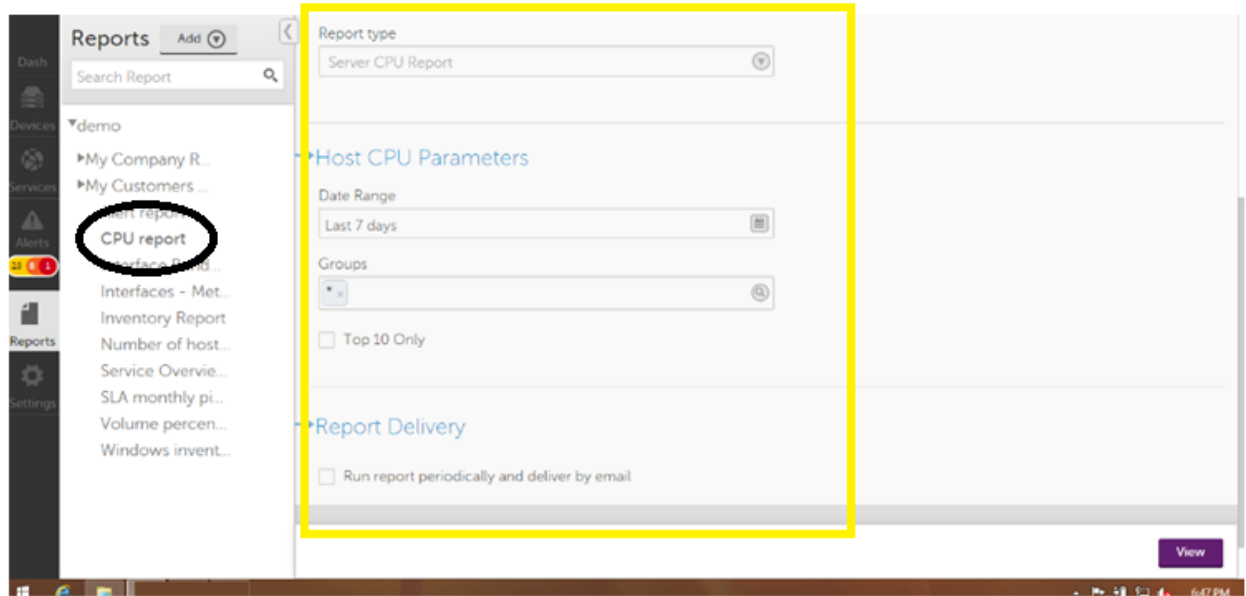
Run report periodically and deliver by email

**Schedule:**  
Every  day  week  month  
At 03:00 pm

**Recipients**  
steve

[View](#)

Reference reports can be automated



Another report setup shown

COMPANY demo

DESCRIPTION

Server CPU Usage report

HOST	Min(%)	Max(%)	Average(%)
Vcenter	28.05	47.51	32.66
ESX Host 5	28.50	48.39	32.40
ESX Host 3	21.21	38.06	23.57
Vcenter	20.81	27.35	23.53
Win2012-2	8.25	22.04	15.12
ESX VM4 - Win 2008 R2 - Exchange, IIS, MSSQL, UNC	9.76	37.67	11.16
Vcenter	8.48	14.65	10.46
Vcenter	8.62	11.80	10.14
Vcenter	3.42	12.58	6.00
ESX Host 2	3.41	12.70	5.98
Vcenter	4.56	10.37	5.86
Domain Controller - Win 2008 R2 - AD, DNS, IIS, WiaDC, UNC	1.70	7.05	2.88
Vcenter	1.55	4.15	2.35
ESX VM1 - Win 2008 R2 - Exchange, IIS	1.01	19.99	1.34
Win2012-1	0.42	47.41	1.34
Hype-V	0.59	2.42	0.82

Converted report shown