

Virtual Network Device Mapping System

Preliminary Design

By

MAJIK Software Solutions

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Welcome

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&

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Agenda

- Introduction – Kelly Morgan
- Data Flow Diagram Updates – Ian Kost
- Functional Requirements Updates – Amanda Danko
- Data Design – Kelly Morgan
- Test Plan – Mark Riley
- Prototypes – Kevin Johnson
- Going forward

Introduction

- Web-based, graphical layout of the devices on the network in the School of Science.
- Allows for retrieval of device information

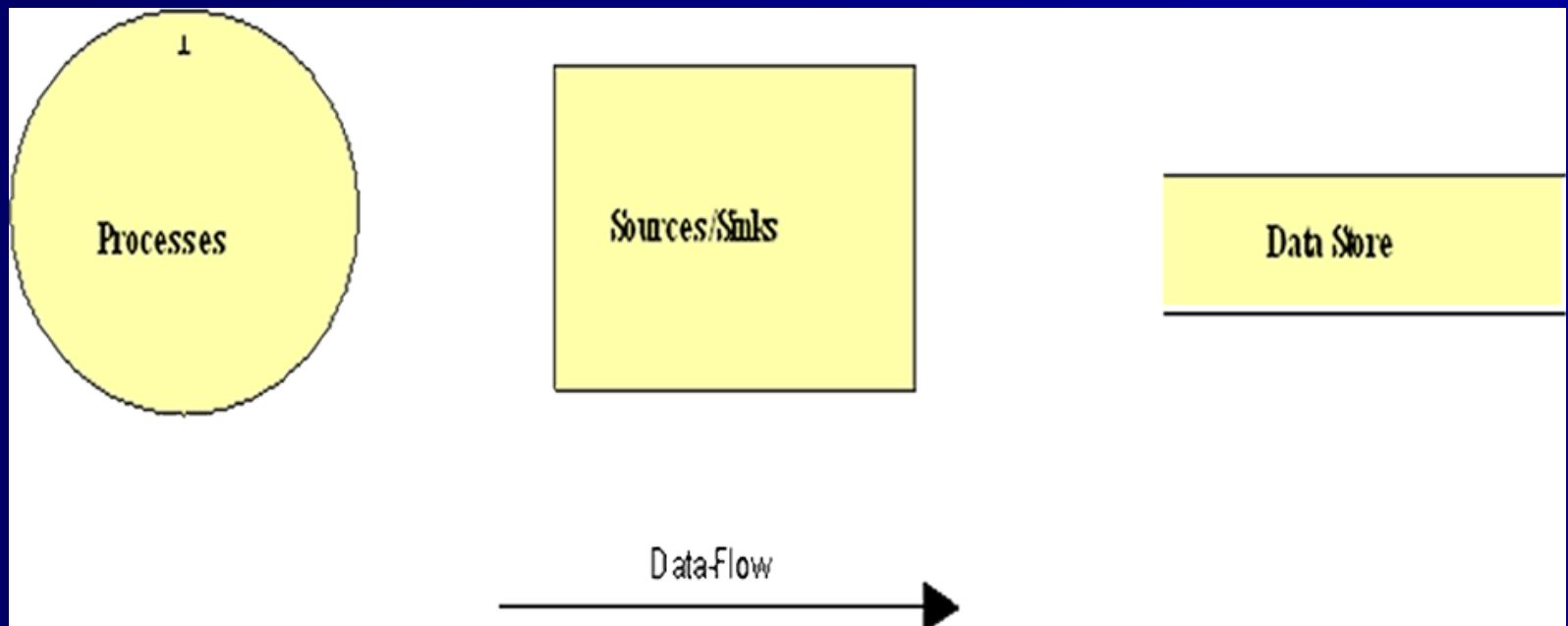
Introduction

- Preliminary Design further identifies the scope of the project
- Identifies data entities
- Prototype screens

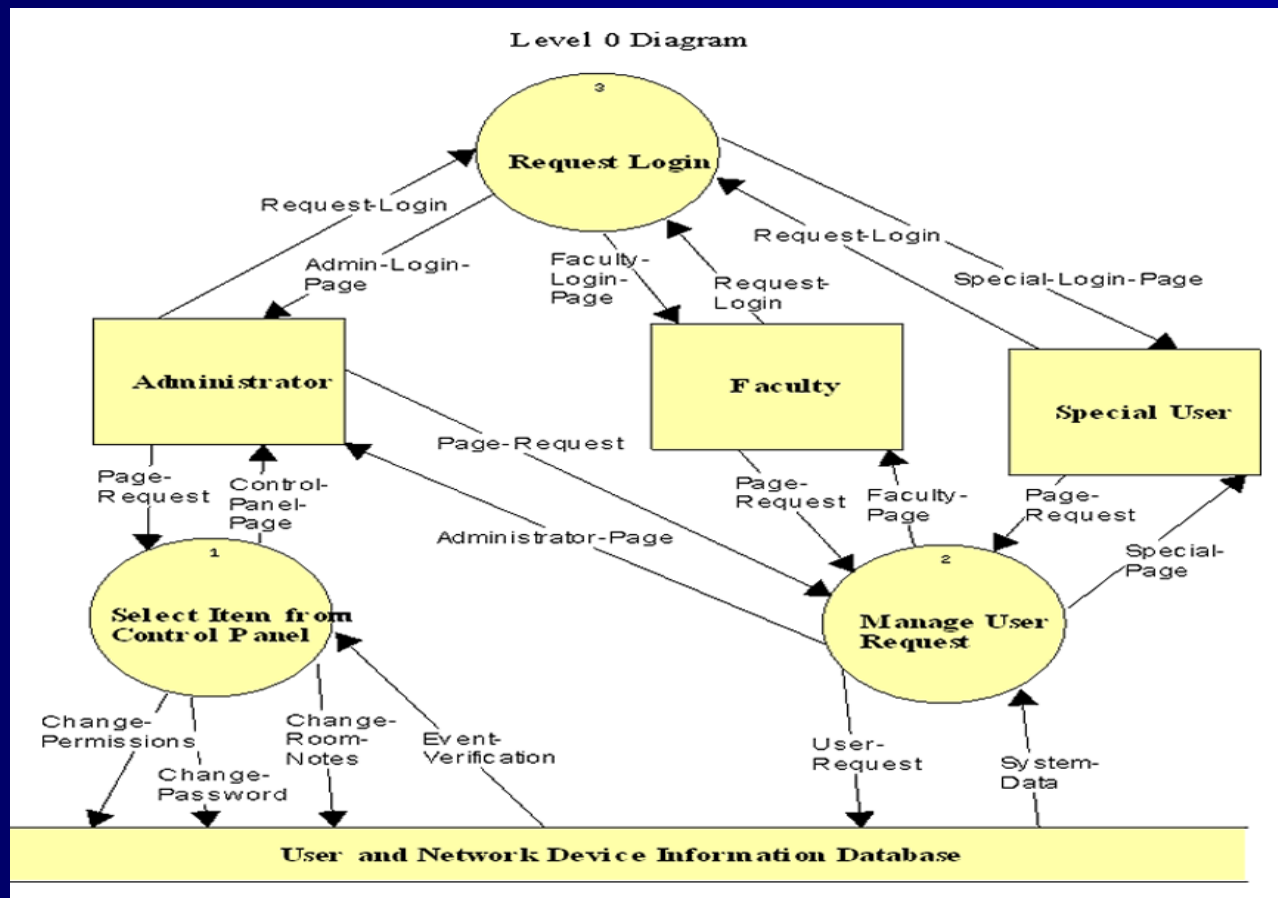
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Data Flow Diagrams Updates



Data Flow Diagrams Updates



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Functional Requirements Updates

- 3 users: Administrator, Faculty/Staff, and Special.
- Editing feature removed – devices updated directly in the database.

Functional Requirements Updates

- Search page
 - Search fields specified:
 - Asset Tag, IP Address, MAC Address, etc.
 - Selectable results to view details.

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Data Design

- Tables
 - Users
 - Name, Building, Room
 - Room
 - Number, Building, Dept., Type
 - Machine
 - Host Name, IP Address, MAC Address, Asset Tag, Building, Room, Dept.,

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Test Plan

- Talk about 4 phases
 - Unit test
 - Integration test
 - System test
 - Acceptance test
- Show unit test
- Attach excel sheet

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Login



Virtual Network Device Mapping System

The Virtual Network Device Mapping System is a web-based application which graphically represents the layout of network devices within the Siena College School of Science. It gives the user a bird's eye view of individual floors, allowing them to select a room from that floor and view a detailed layout of the network devices in that room. Individual devices can then be selected to display comprehensive information about them.

User Name

Password

Login

Clear

[Siena College](#) | [Computer Science Dept.](#) | [Software Engineering](#)

Failed Login



Virtual Network Device Mapping System

The Virtual Network Device Mapping System is a web-based application which graphically represents the layout of network devices within the Siena College School of Science. It gives the user a bird's eye view of individual floors, allowing them to select a room from that floor and view a detailed layout of the network devices in that room. Individual devices can then be selected to display comprehensive information about them.

The User Name and/or Password you have entered is incorrect. Please try again.

User Name

Password

Login

Clear

[Siena College](#) | [Computer Science Dept.](#) | [Software Engineering](#)

Logged In

Control Panel

[Logout](#) from Administrator

Using the Search Feature

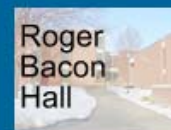
To access the Search feature simply click the link in the heading above. Or, to do so from any other page, click the "Search" button in the upper right-hand corner.

Devices can be searched for using any of the categories of information stored. Please note that although all of the categories are displayed, you do not have to fill in all of them. Whatever categories you fill in will be used, and those left blank will not be. This is meant to give you the greatest amount of flexibility possible in finding a device.

Search results are displayed with abbreviated information. The Device Name, Building, Room, IP address, MAC address, and Equipment Type of each device matching the search criteria are displayed. Selecting the Device Name will display the Room Layout view of the room that the device is located in, with the full device information in the dialog box below the layout.

Welcome, to the Virtual Network Device Mapping System. In order to get started, you have two options. You may either use the Search feature, as described in the box on the left, or select a floor from below.

To select a floor, first decide which building you wish to view, and then select a floor number from below it to display that floor plan. The floor plan will load on a new page which will give you the layout of the rooms on that floor and further directions. On all subsequent pages, you will be able to select floors from dropdown menus in the upper left-hand corner of the page. If you have any further questions, please visit our [HELP](#) page.



[1st Floor](#)

[2nd Floor](#)

[3rd Floor](#)

[4th Floor](#)



[1st Floor](#)

[2nd Floor](#)

[3rd Floor](#)

Floor Plan

Roger Bacon Floor #

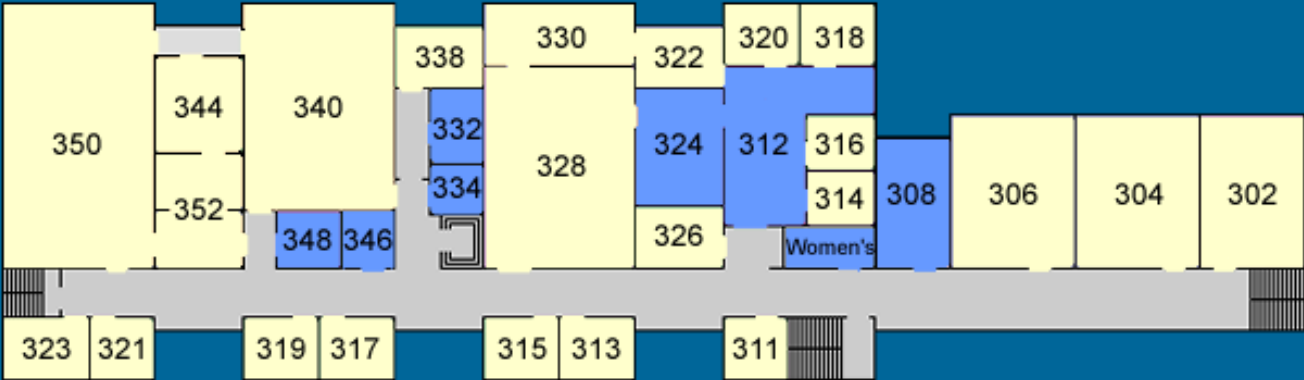
Morrell Floor #

[Control Panel](#)

[Search](#)

[Logout](#) from **Administrator**

Roger Bacon Hall - 3rd Floor



Rooms colored **yellow** may be clicked to display a detailed "Room View" which will show the layout of network devices in that room. Rooms colored **blue** are not viewable.

Room Layout

Roger Bacon Floor #

Morrell Floor #

[Control Panel](#)

[Search](#)

[Logout from Administrator](#)

[Zoom Out to 3rd Floor View](#)

Roger Bacon Hall - 3rd Floor - Room #306

Legend

Computer:



Wall Box:



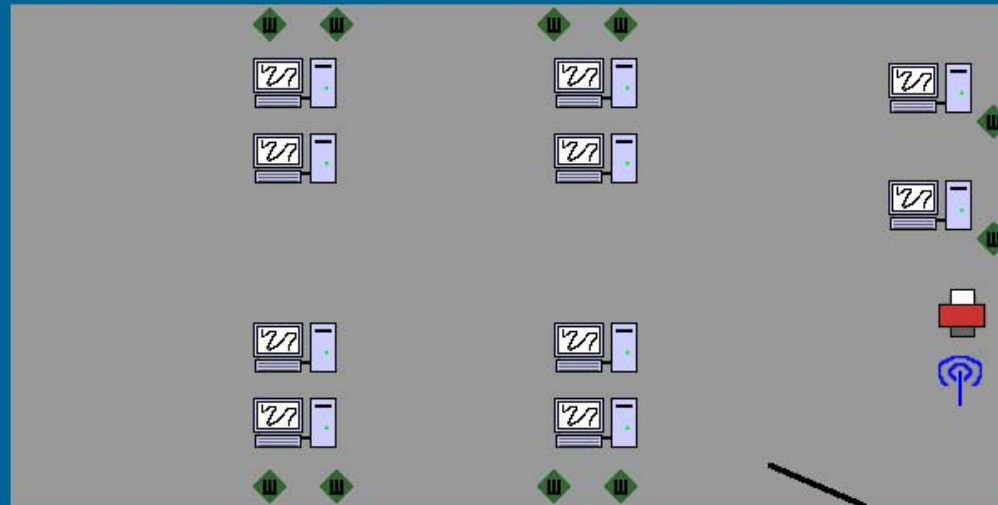
Printer:



Wireless Access Point (WAP):



Door:



```
IP Address: 12.345.67.890
MAC Address: 10-0C-F1-56-98-AD
- Classification
  User Name: sxx0000
  User Type: Student
  Department: Computer Science
| Inventory
Comments: n/a
-----
```

Room Notes

-Classroom used for
Computer Science labs.

Expanded Device Information

```
IP Address: 12.345.67.890
MAC Address: 10-0C-F1-56-98-AD
- Classification
  User Name: sxx0000
  User Type: Student
  Department: Computer Science
- Inventory
  Asset Tag #: 21095
  Priority: M
  VP Code: VPAA
  Building: Roger Bacon
  Room #: 306
  Manufacturer: Dell
  Model: Dimension 4xxx
  Equipment Type: PC
  Monitor Type: CRT
  Purchase Year: 200x
  Installed Date: 200x
  Purchase Order #: 4185906
  CPU: Pentium 4
  Speed: 1.3 GHz
  Disk: 20 GB
  Memory: 1 GB of RAM
  Serial #: 418A48D3C
Comments: None.
-----
```

Search

Roger Bacon Floor #

Morrell Floor #

[Control Panel](#)

[Logout from Administrator](#)

Search

Device Name:

User:

MAC Address:

Building:

Equipment Type:

Model:

Monitor Type:

Installed Date:

CPU:

Disk:

Department:

Priority:

Asset Tag #:

User Type:

IP Address:

Room:

Manufacturer:

VP Code:

Purchase Year:

Purchase Order #:

Speed:

Memory:

Serial #:

Search Results

Roger Bacon Floor #

Morrell Floor #

[Control Panel](#)

[Logout](#) from Administrator

Search Results

Device Name: [RB352-seb3](#)
Building: Roger Bacon
Room: 352
IP Address: 12.345.67.890
MAC Address: 10-0C-F1-56-98-AD
Equipment Type: PC

Device Name: [RB352-seb4](#)
Building: Roger Bacon
Room: 352
IP Address: 82.435.97.860
MAC Address: 15-BC-F1-56-98-AE
Equipment Type: PC

Control Panel

Roger Bacon Floor #

Morrell Floor #

Search

[Logout from Administrator](#)

Control Panel

Passwords

Provides for the alteration of any User's password. Users can be selected from the dropdown menu, and then a new password entered. A confirmation page will be displayed after the "Confirm" button has been selected.

Permissions

Allows limitation of what network devices individual users can view. The Administrator first searches for devices, which loads a new page. Then, devices can be chosen via a checkbox on each result. Once the devices are selected, the Administrator can choose a user from a dropdown menu and set the user's permission for those devices to either "Read" or "Restrict." After the "Confirm" button is selected, the original Permissions page is displayed.

Room Notes

Notes pertaining to specific rooms can be saved here. They will be displayed for all users alongside the layout of that room. Enter a room number, then enter the desired text in the box and press "Save." A confirmation page will be displayed.

Control Panel > Passwords

Roger Bacon Floor #

Morrell Floor #

Search

[Logout from Administrator](#)

Control Panel

Passwords

Permissions

Room Notes

Wall Boxes

Edit Passwords

User Name

Administrator

New Password

Confirm

Clear

Control Panel > Password Confirmation

Roger Bacon Floor #

Morrell Floor #

Search

[Logout from Administrator](#)

Control Panel

Passwords

Permissions

Room Notes

Wall Boxes

Edit Passwords

Password successfully changed. [Click Here](#) to edit another password.

Control Panel > Permissions

Roger Bacon Floor #

Morrell Floor #

[Logout from Administrator](#)

Control Panel

User Permissions

Search for Devices

Device Name:

Equipment Type:

Building:

Room #:

Control Panel > Permissions cont.

Roger Bacon Floor # Morrell Floor # [Logout from Administrator](#)

Control Panel

User Permissions

■ Device Name:	<u>RB352-seb3</u>
Building:	Roger Bacon
Room:	352
IP Address:	12.345.67.890
MAC Address:	10-0C-F1-56-98-AD
Equipment Type:	PC

■ Device Name:	<u>RB352-seb4</u>
Building:	Roger Bacon
Room:	352
IP Address:	21.543.76.089
MAC Address:	1A-0D-E1-5C-98-BD
Equipment Type:	PC

User Name:	<input type="text" value="User1"/>
Permission:	<input type="radio"/> Read <input type="radio"/> Restrict
<input type="button" value="Confirm"/>	

Control Panel > Room Notes

Roger Bacon Floor # Morrell Floor # [Logout from Administrator](#)

Control Panel

Room Notes

Building :

Floor #:

Room #:

Notes :

Control Panel > Room Notes Confirmation

Roger Bacon Floor #

Morrell Floor #

Search

[Logout from Administrator](#)

Control Panel

Passwords

Permissions

Room Notes

Wall Boxes

Room Notes

Room Note saved successfully. [Click Here](#) to add another note.

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Going Forward...

- Detailed Design Document
 - February 20, 2007
- Development
- Acceptance Test
 - May 1, 2007
- Academic Celebration Presentation
 - May 5, 2007

Questions?

Thank You!

We look forward to starting
development next semester.