School of Science
Network Device Display System

Preliminary Design
by
Orion Technologies

Roger Bacon Hall
Room 328
November 30, 2007 - 8:15 AM
Welcome Our Clients

Mr. Ken Swarner
Senior Systems Administrator
School of Science
Siena College
&

Mr. Eric Crossman
Assistant Systems Administrator
School of Science
Siena College
Orion Technologies

- Aleksandr Spektor - Team Leader
- Nicholas Hogan - Information Specialist
- Christopher Vincek - Systems Administrator
- Kevin Marsteller - Webmaster
Agenda

• Introduction
  – Aleksandr Spektor

• Data Flow & Structure Diagrams
  – Christopher Vincek

• Logical Data Stores & Test Plan
  – Christopher Vincek

• Prototypes
  – Nicholas Hogan

• Moving Forward
  – Aleksandr Spektor
Agenda

• Introduction
  • Data Flow Diagrams
  • Structure Diagram
  • Logical Data Stores
  • Test Plan
  • Prototypes
  • Moving Forward
Introduction

- Develop user friendly floor plan map
- View all network device info graphically
- Web based network device mapping tool
Agenda

• Introduction
• **Data Flow Diagrams**
  • Structure Diagram
  • Logical Data Stores
• Test Plan
• Prototypes
• Moving Forward
Data Flow Diagrams

Key

- Sink/Source
- Data Store
- Process
- Data Flow

Administrator

Faculty

Custom User

School of Science Device Network System
• Introduction
• Data Flow Diagrams
• **Structure Diagram**
• Logical Data Stores
• Test Plan
• Prototypes
• Moving Forward
Agenda

• Introduction
• Data Flow Diagrams
• Structure Diagram
• **Logical Data Stores**
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## Data Store - User Table

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserName</td>
<td>VARCHAR</td>
<td>16</td>
<td>User's User Name</td>
</tr>
<tr>
<td>Password</td>
<td>VARCHAR</td>
<td>16</td>
<td>User's Password</td>
</tr>
<tr>
<td>Room</td>
<td>VARCHAR</td>
<td>6</td>
<td>User's Office</td>
</tr>
<tr>
<td>UserType</td>
<td>VARCHAR</td>
<td>16</td>
<td>Group User belongs to</td>
</tr>
<tr>
<td>RoomPermissions</td>
<td>ARRAY</td>
<td>60</td>
<td>List of rooms user belongs to</td>
</tr>
<tr>
<td>DetailPermissions</td>
<td>ARRAY</td>
<td>100</td>
<td>List of details user can access</td>
</tr>
</tbody>
</table>
# Data Store - Room Table

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUILDING</td>
<td>VARCHAR</td>
<td>5</td>
<td>The building of the room</td>
</tr>
<tr>
<td>ROOM_NUMBER</td>
<td>INTEGER</td>
<td>4</td>
<td>The number of the room</td>
</tr>
<tr>
<td>NOTES</td>
<td>VARCHAR</td>
<td>100</td>
<td>Room Notes</td>
</tr>
</tbody>
</table>
Agenda

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# Test Catalog

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Test Number</th>
<th>Unit Test Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>P F</td>
<td>1</td>
<td>Login Page</td>
</tr>
<tr>
<td>P F</td>
<td>2</td>
<td>Room Search Page</td>
</tr>
<tr>
<td>P F</td>
<td>3</td>
<td>Basic Search Page</td>
</tr>
<tr>
<td>P F</td>
<td>4</td>
<td>Advanced Search Page</td>
</tr>
<tr>
<td>P F</td>
<td>5</td>
<td>Floor Plan Page</td>
</tr>
<tr>
<td>P F</td>
<td>6</td>
<td>Room View Page</td>
</tr>
<tr>
<td>P F</td>
<td>7</td>
<td>Room Edit Page</td>
</tr>
<tr>
<td>P F</td>
<td>8</td>
<td>Search for New Devices Page</td>
</tr>
<tr>
<td>P F</td>
<td>9</td>
<td>Place Device Page</td>
</tr>
<tr>
<td>P F</td>
<td>10</td>
<td>Control Panel Main Page</td>
</tr>
<tr>
<td>P F</td>
<td>11</td>
<td>Control Panel Add User Page</td>
</tr>
<tr>
<td>P F</td>
<td>12</td>
<td>Control Panel User Main page</td>
</tr>
<tr>
<td>P F</td>
<td>13</td>
<td>Control Panel Change Password Page</td>
</tr>
<tr>
<td>P F</td>
<td>14</td>
<td>Control Panel Change Permissions Page</td>
</tr>
<tr>
<td>P F</td>
<td>15</td>
<td>Control Panel Change User Type Page</td>
</tr>
</tbody>
</table>
## Test 3 - Basic Search

<table>
<thead>
<tr>
<th>Number</th>
<th>Test Case name</th>
<th>Description</th>
<th>Input</th>
<th>Expected Result</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>SelectFloorRB</td>
<td>User left-clicks on the RB radio button under the &quot;by floor&quot; header.</td>
<td>left-click</td>
<td>Radio button selects RB</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>SelectFloorMSC</td>
<td>User left-clicks on the MSC radio button under the &quot;by floor&quot; header.</td>
<td>left-click</td>
<td>Radio button selects MSC</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>SelectRoomRB</td>
<td>User left-clicks on the RB radio button under the &quot;by room&quot; header.</td>
<td>left-click</td>
<td>Radio button selects RB</td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>SelectRoomMSC</td>
<td>User left-clicks on the MSC radio button under the &quot;by room&quot; header.</td>
<td>left-click</td>
<td>Radio button selects MSC</td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>EnterFloor</td>
<td>User enters a floor number into the input box under the &quot;by floor&quot; header.</td>
<td>Floor Number</td>
<td>Entered number appears in textbox.</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>EnterRoom</td>
<td>User enters a room number into the input box under the &quot;by room&quot; header.</td>
<td>Room Number</td>
<td>Entered number appears in textbox.</td>
<td></td>
</tr>
<tr>
<td>3.7</td>
<td>AddFloor</td>
<td>User left-clicks on the &quot;Add Floor&quot; button.</td>
<td>left-click</td>
<td>Entered floor number will be added to the search parameters</td>
<td></td>
</tr>
</tbody>
</table>
### Test 3 – Basic Search (Continued)

<table>
<thead>
<tr>
<th>Number</th>
<th>Test Case name</th>
<th>Description</th>
<th>Input</th>
<th>Expected Result</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8</td>
<td>AddRoom</td>
<td>User left-clicks on the &quot;Add Room&quot; button.</td>
<td>left-click</td>
<td>Entered room number will be added to the search parameters</td>
<td></td>
</tr>
<tr>
<td>3.9</td>
<td>Select Entered Floor</td>
<td>User left-clicks on an added floor in the added floor box.</td>
<td>left-click</td>
<td>Selected floor becomes highlighted.</td>
<td></td>
</tr>
<tr>
<td>3.10</td>
<td>Select Entered Room</td>
<td>User left-clicks on an added room in the added room box.</td>
<td>left-click</td>
<td>Selected room becomes highlighted.</td>
<td></td>
</tr>
<tr>
<td>3.11</td>
<td>RemoveFloor</td>
<td>User left-clicks on the &quot;Remove Floor&quot; button.</td>
<td>left-click</td>
<td>Selected floor is removed from the added floor box.</td>
<td></td>
</tr>
<tr>
<td>3.12</td>
<td>RemoveRoom</td>
<td>User left-clicks on the &quot;Remove Room&quot; button.</td>
<td>left-click</td>
<td>Selected room is removed from the added room box.</td>
<td></td>
</tr>
<tr>
<td>3.13</td>
<td>Attribute DropDownList</td>
<td>User left-clicks on the &quot;Search by Attribute&quot; dropdown menu.</td>
<td>left-click</td>
<td>The dropdown menu will show all device attributes the user has permissions for.</td>
<td></td>
</tr>
<tr>
<td>3.14</td>
<td>Enter Attribute Value</td>
<td>User enters a value for the selected attribute in the textbox under the &quot;Search by Attribute&quot; header.</td>
<td>Attribute Value</td>
<td>The input value will appear in the textbox.</td>
<td></td>
</tr>
<tr>
<td>3.15</td>
<td>SearchDevices</td>
<td>User left-clicks on the &quot;Search&quot; button.</td>
<td>left-click</td>
<td>new page listing all found devices loaded</td>
<td></td>
</tr>
</tbody>
</table>
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• **Prototypes**
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Login Page

School of Science
Network Device Display System

System Login

User Name: 
Password: 
Log In
forgot your password?
Building Navigation

School of Science
Network Device Display System

Logged in as
K.Swarner

Logged out

Select Floor

Jump to Room:

Roger Bacon
Morell Science Center

Control Panel | Advanced Search | Basic Search
Building Navigation

School of Science
Network Device Display System

Select Floor
Roger Bacon - Floor 1
Roger Bacon - Floor 2
Roger Bacon - Floor 3
Roger Bacon - Floor 4
Morell Science Center - Floor 0
Morell Science Center - Floor 1
Morell Science Center - Floor 2
Room View (Faculty/Custom)
Room Edit (Administrator)
Search New Devices

School of Science
Network Device Display System

Select Floor

Search for New Devices

The following devices need to be placed:

<table>
<thead>
<tr>
<th>Device</th>
<th>IP Address</th>
<th>MAC Address</th>
<th>Place In Room</th>
<th>Place Elsewhere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>128.128.128.128</td>
<td>12.34.56.78.9A.BC</td>
<td>Place In Room</td>
<td>Place Elsewhere</td>
</tr>
<tr>
<td>Computer</td>
<td>192.168.0.128</td>
<td>10.22.46.62.98.BC</td>
<td>Place In Room</td>
<td>Place Elsewhere</td>
</tr>
</tbody>
</table>
Place Device

School of Science Network Device Display System

Select Floor

Jump to Room:

Control Panel | Advanced Search | Basic Search

Place Device

Where would you like to place Computer with Host Name xxxxxxxx

Place In Room:

Roger Bacon
Morell Science Center

Edit Mode

Move in Room
Move to other Room
Ping Device
Search for new devices
Edit Room Note
Search Results

Your search for 192.168.0.168 yielded:

<table>
<thead>
<tr>
<th>Device</th>
<th>Name</th>
<th>IP Address</th>
<th>Asset Tag</th>
<th>more info</th>
<th>view room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>rb350mac10</td>
<td>192.168.0.168</td>
<td>xxxxx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
User Found

**School of Science**
**Network Device Display System**

Logged in as
KSwanner
Logout

Select Floor

Control Panel

Search Users

User lederman found

Tlederman
Room: RB326
Type: Custom

Change Search Criteria

Jump to Room:

Roger Bacon
Morell Science Center

Control Panel | Advanced Search | Basic Search
User Settings

Logged In as K. Swanson
Logout

School of Science
Network Device Display System

User Settings

Select Floor

Control Panel

Browse Users
Search for User
Add User

TLederman

Room: RB326
Change Room
User Type: Custom
Change Type
Password: password
Change Password
View Permissions
Change Permissions

Jump to Room:

Control Panel | Advanced Search | Basic Search

Roger Bacon
Morell Science Center
Add a user
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- Moving Forward
Current Status

- Completed
  - Software Plan
  - Requirements Specification
  - Preliminary Design
    - Detailed Design
      - Acceptance Test

Today
Current Status

Software Plan

Requirements Specification

Preliminary Design

Detailed Design

Acceptance Test

Next
Upcoming Events

• Detailed Design
  – Presentation: February 16, 2008

• Acceptance Test
  – April 22, 2008

• Academic Celebration
  – May 3, 2008
Preliminary Design Summary

- Introduction
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Any Questions?