

Working with the Organization Structure

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Working with the Organization Structure has been enhanced in SiteAudit v4.4 with organizational importing and automatic printer assignment. Used with Move, Add and Change tracking it provides the highest level of inventory reporting and alerting.

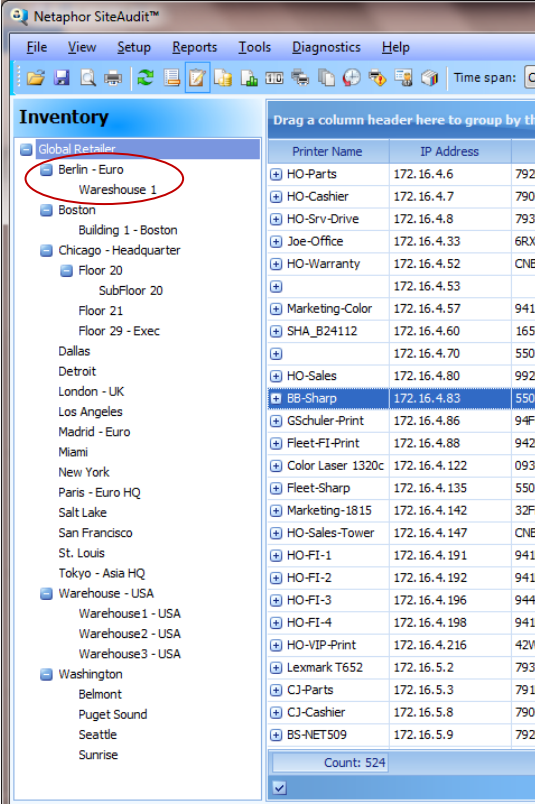
Feature Description

SiteAudit provides the capability to easily create a hierarchical organization structure for managing printers. The structure can represent departments, locations or any other 'container' used to hold printers. The structure allows subunits to be added or removed as required by the organization. All printers are displayed at the top of the hierarchy.

What is new in SiteAudit v4.4 is organizational importing and the association of addresses, ranges and networks with the structure. For example, an IP range can be associated with the location Berlin. Any printer installed or added in this range will automatically be placed in the location Berlin. Or if a printer is removed for service and then returned at a different IP range it gets automatically assigned to the new location and an alert and report will track this change. This automation reduces the costs to IT managers responsible for tracking and reporting inventory management. (see figure 1.)

Additional key benefits include:

- ✓ Printer location visibility
- ✓ Inventory accuracy
- ✓ Lower costs for managing inventory changes
- ✓ Reporting for printer department changes
- ✓ Alerting for printer department changes



Printer Name	IP Address	
HO-Parts	172.16.4.6	792F
HO-Cashier	172.16.4.7	790C
HO-Srv-Drive	172.16.4.8	793V
Joe-Office	172.16.4.33	6RX:
HO-Warranty	172.16.4.52	CNBK
	172.16.4.53	
Marketing-Color	172.16.4.57	9417
SHA_B24112	172.16.4.60	165C
	172.16.4.70	5501
HO-Sales	172.16.4.80	992E
BB-Sharp	172.16.4.83	5501
GSchuler-Print	172.16.4.86	94FC
Fleet-FI-Print	172.16.4.88	942F
Color Laser 1320c	172.16.4.122	093C
Fleet-Sharp	172.16.4.135	5501
Marketing-1815	172.16.4.142	32FF
HO-Sales-Tower	172.16.4.147	CNBK
HO-FI-1	172.16.4.191	941E
HO-FI-2	172.16.4.192	941F
HO-FI-3	172.16.4.196	9441
HO-FI-4	172.16.4.198	941F
HO-VIP-Print	172.16.4.216	42W
Lexmark T652	172.16.5.2	793Y
CJ-Parts	172.16.5.3	791F
CJ-Cashier	172.16.5.8	790C
BS-NET509	172.16.5.9	792F

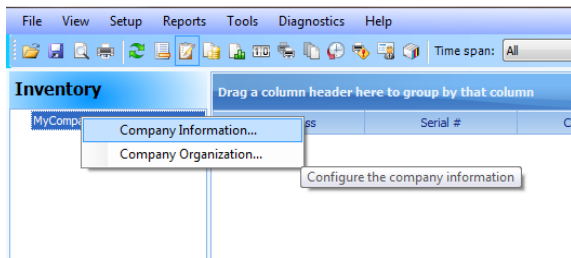
Figure 1: Hierarchical Organizational Structure

Described next is how to create an organization structure. There are two ways to accomplish this. The first is by manually creating the organization and the second is done by using an import mechanism.

Manually Creating the Organizational Structure

For smaller organizations manually creating the organization structure is time efficient. The steps are simple and recounted below.

Step 1: Adding the Organization Name and Address



- Right click on My Company
- Select Company Information
- Enter Company Information

The Company Name begins the hierarchical structure.

Select Properties to add a Departmental Comment or Note. For example, date when organization structure was created.

Step 2: Add the number of employees (users)

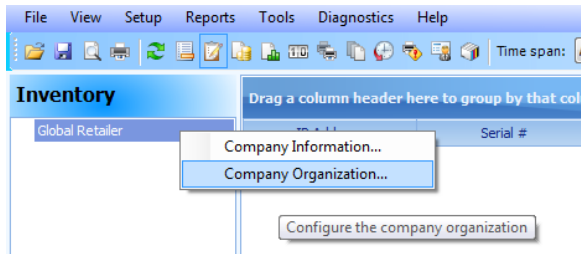
- Select Company Organization
- Enter the number of users

The number of users is an important metric for the Analysis Summary view. It provides the data for:

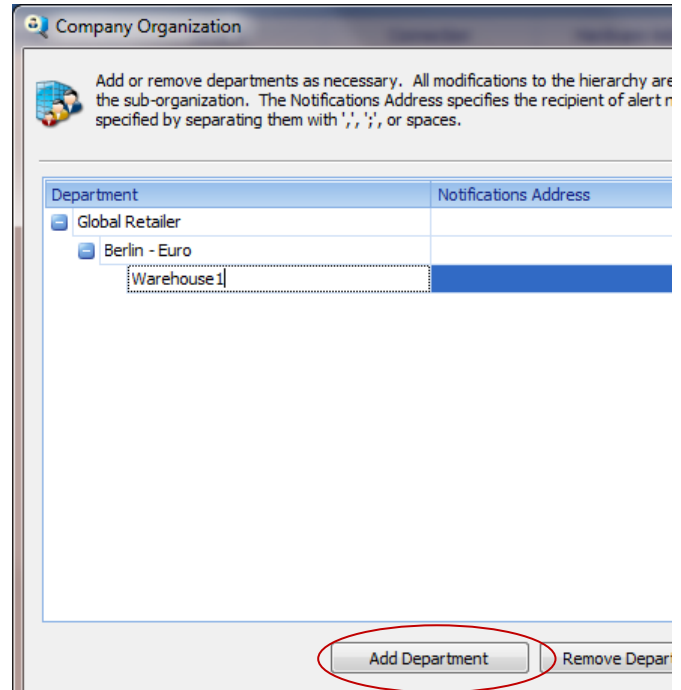
- ✓ Users per Device
- ✓ Pages per User

Department	Notifications Address	Users
Global Retailer		2500

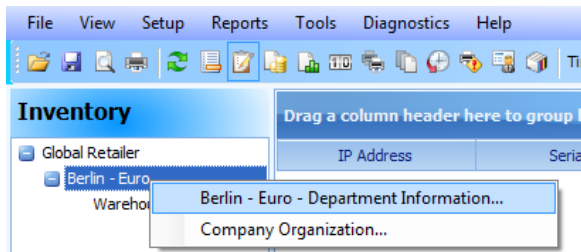
Step 3: Constructing the Organization



- Right click on 'Global Retailer'
- Select Company Organization
- Select Add Department
- Enter Department name, 'Berlin'
- Select the Department to add a Sub department 'Warehouse1'



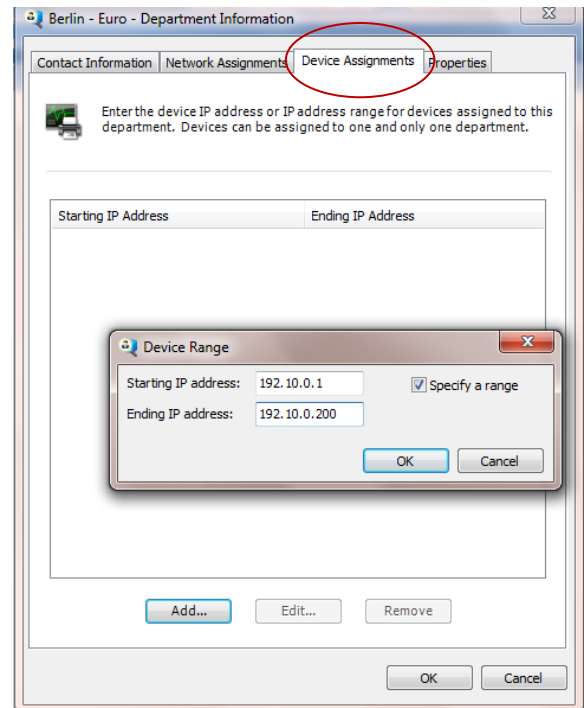
Step 4: Add Addresses, Ranges or Networks



- Right click on the Department 'Berlin'
- Select Department Information
- Add Contact Information

Select Addressing tab for Printer Assignment

- Example:
- Device Assignment
- Enter Range



Printers within the Range will automatically be assigned to this department. In addition a MAC event will be added into the Incident History view for reporting and alerting.

Importing the Organizational Structure

Typically larger organizations will find create an import simpler and faster than manually creating the organization structure. This section reviews the process for doing that.

The Organization Import feature makes it possible to import company and department information into a SiteAudit database using an XML import file document that describes the data to import. Importing organization data will delete any existing Company or Department data (including any address and printer assignment information) and then import the new data.

SiteAudit supports one company and 0 or more departments inside the company. Printers can then be automatically assigned to a department based on printer assignment ranges or networks specified in the import file. A department can have 0 or more printer assignment ranges or networks. After import, devices will be automatically assigned to their designated departments.

Company

These fields can be imported for a company:

- Company name (CompanyName)
- Street address 1 (Street1)
- Street address 2 (Street2)
- City
- State
- Zip
- Country
- Phone
- Email
- Fax
- Contact name (ContactName)
- Contact phone (ContactPhone)
- Contact email (ContactEmail)
- Number of users (NumberOfUsers)
- Alert email address (AlertEmailAddress)
- Downtime cost per user hour (DowntimeCostPerUserHour)
- Comment
- Notes

Department

These fields can be imported for a department:

- Department name (DepartmentName)
- Street address 1 (Street1)
- Street address 2 (Street2)
- City
- State
- Zip
- Country
- Phone
- Email
- Fax
- Contact name (ContactName)
- Contact phone (ContactPhone)
- Contact email (ContactEmail)
- Number of users (NumberOfUsers)
- Alert email address (AlertEmailAddress)
- Downtime cost per user hour (DowntimeCostPerUserHour)
- Comment
- Notes

Printer assignment by IP address:

- IP address (IPAddress)

Printer assignment IP range information:

- Start address (StartAddress)
- End address (EndAddress)

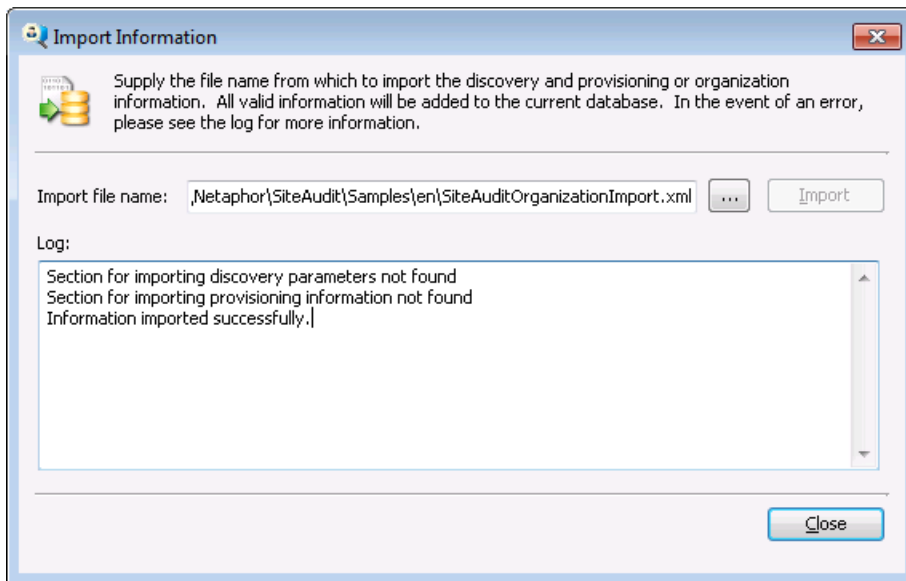
Printer assignment network information:


- Network address (NetworkAddress)
- Mask - can be specified as a network mask or a CIDR value

Import Procedure

The XML import document containing the desired import data must be created prior to importing data into SiteAudit. A sample import document, *SiteAuditOrganizationImport.xml*, is installed in the SiteAudit **Sample/en** (English) folder. This document can be copied and modified to import data for a specific environment.

To import data into a SiteAudit database, launch the Import Information dialog by selecting **Import...** from the **Tools** menu.



- Click the  button to navigate and select the import document.
- Click the **Import** button to start the import.

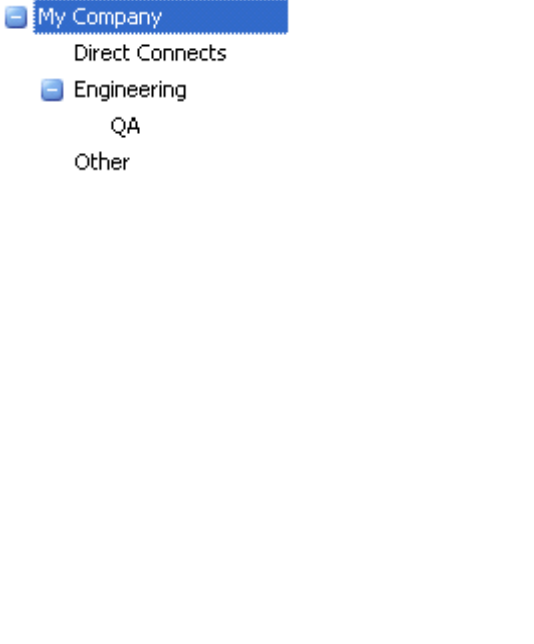
Once the import process completes, a popup dialog appears and indicates if the import process succeeded or if errors occurred. The Log: text area will indicate which import data was imported and which sections were not found.

NOTE: Discovery and provisioning information cannot be imported in the same import file that contains organization information. To import discovery and/or provisioning information, use a separate import file.

Company and Department Examples: Importing company and department information

Every organization import file must have one Company element. Within a company, zero or more departments can be specified. The only required element for a Company is CompanyName. The only required element for a department is DepartmentName.

Address information can be specified for a Company or Department, but is optional.

<pre><!--Example importing Company and department hierarchy --> <SiteAudit xmlns="http://tempuri.org/SiteAuditImportSchema.xsd"> <Import> <Organization> <Company> <CompanyName><![CDATA[My Company]]></CompanyName> <Departments> <Department> <DepartmentName>Engineering</DepartmentName> </Department> <Department> <DepartmentName>QA</DepartmentName> </Department> </Departments> <Department> <DepartmentName>Other</DepartmentName> </Department> <Department> <DepartmentName>Direct Connects</DepartmentName> </Department> </Company> </Organization> </Import> </SiteAudit></pre>	
--	--

```

<!--Example importing Company information fields-->
<SiteAudit xmlns="http://tempuri.org/SiteAuditImportSchema.xsd">
  <Import>
    <Organization>
      <Company>
        <CompanyName><![CDATA[My Company]]></CompanyName>
        <NumberOfUsers>54</NumberOfUsers>
        <AlertEmailAddress><![CDATA[alerts@mycompany.com]]>
        </AlertEmailAddress>
        <DowntimeCostPerUserHour>140</DowntimeCostPerUserHour>
        <Comment><![CDATA[Insert a comment here for My Company]]>
        </Comment>
        <Notes><![CDATA[Insert a note here for My Company.]]></Notes>
        <Timezone>2</Timezone>
        <Address>
          <Street1><![CDATA[1234 Main Street]]></Street1>
          <Street2><![CDATA[My Company, Inc.]]></Street2>
          <City><![CDATA[Irvine]]></City>
          <State><![CDATA[CA]]></State>
          <Zip><![CDATA[92618]]></Zip>
          <Country><![CDATA[USA]]></Country>
          <Phone>555-1234</Phone>
          <Fax>555-4321</Fax>
          <Email>support@mycompany.com</Email>
        <Contact>
          <ContactName><![CDATA[John Smith]]></ContactName>
          <ContactPhone>123-5555</ContactPhone>
          <ContactEmail>contact@mycompany.com</ContactEmail>
        </Contact>
      </Address>
    </Company>
  </Organization>
</Import>
</SiteAudit>

```

My Company - Company Information

Contact Information Properties

Address:

Name: My Company

Address: 1234 Main Street

My Company, Inc.

City: Irvine

State: CA

Zip code: 92618

Country: USA

Phone: 555-1234

Fax: 555-4321

Email: support@mycompany.com

Contact:

Name: John Smith

Phone: 123-5555

Email: contact@mycompany.com

OK Cancel

My Company - Company Information

Contact Information Properties

Downtime cost per user hour: 140.00

Comment:

Insert a comment here for My Company

Notes:

Insert a note here for My Company.

OK Cancel

```

<!--Example importing Department information fields-->
<SiteAudit xmlns="http://tempuri.org/SiteAuditImportSchema.xsd">
  <Import>
    <Organization>
      <Company>
        <CompanyName><![CDATA[My Company]]></CompanyName>
        <Departments>
          <Department>
            <DepartmentName>Engineering</DepartmentName>
          </Department>
          <Department>
            <DepartmentName>QA</DepartmentName>
            <NumberOfUsers>12</NumberOfUsers>
            <AlertEmailAddress>qa@mycompany.com</AlertEmailAddress>
            <DowntimeCostPerUserHour>555</DowntimeCostPerUserHour>
            <Comment>QA specific comment</Comment>
            <Notes>QA specific notes</Notes>
            <Timezone>20</Timezone>
            <Address>
              <Street1><![CDATA[1234 Main Street]]></Street1>
              <Street2><![CDATA[ATTN: QA Department]]></Street2>
              <City>Irvine</City>
              <State>California</State>
              <Zip>92618</Zip>
              <Country><![CDATA[United States]]></Country>
              <Phone>555-2222</Phone>
              <Fax>555-4321</Fax>
              <Email>qadmin@mycompany.com</Email>
            </Address>
            <Contact>
              <ContactName><![CDATA[QA Smith]]></ContactName>
              <ContactPhone>555-3333</ContactPhone>
              <ContactEmail>qasmith@mycompany.com</ContactEmail>
            </Contact>
          </Department>
        </Departments>
      </Company>
    </Organization>
  </Import>
</SiteAudit>

```

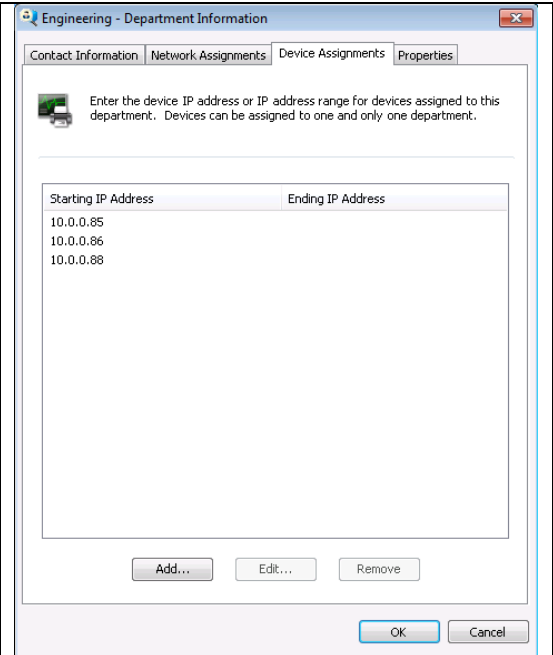
Printer Assignment Examples: Importing printer assignment information

Printer assignment information can be optionally specified for any department. This information can be entered in the form of a device IP address, IP address range, or a network. See the examples below.

```

<!--Example importing printer assignment by IP Address-->
<SiteAudit xmlns="http://tempuri.org/SiteAuditImportSchema.xsd">
  <Import>
    <Organization>
      <Company>
        <CompanyName><![CDATA[My Company]]></CompanyName>
        <Departments>
          <Department>
            <DepartmentName>Engineering</DepartmentName>
            <PrinterAssignment>
              <Devices>
                <IPAddress>10.0.0.85</IPAddress>
                <IPAddress>10.0.0.86</IPAddress>
                <IPAddress>10.0.0.88</IPAddress>
              </Devices>
            </PrinterAssignment>
          </Department>
          <Department>
            <DepartmentName>QA</DepartmentName>
          </Department>
        </Departments>
      </Organization>
    </Import>
  </SiteAudit>

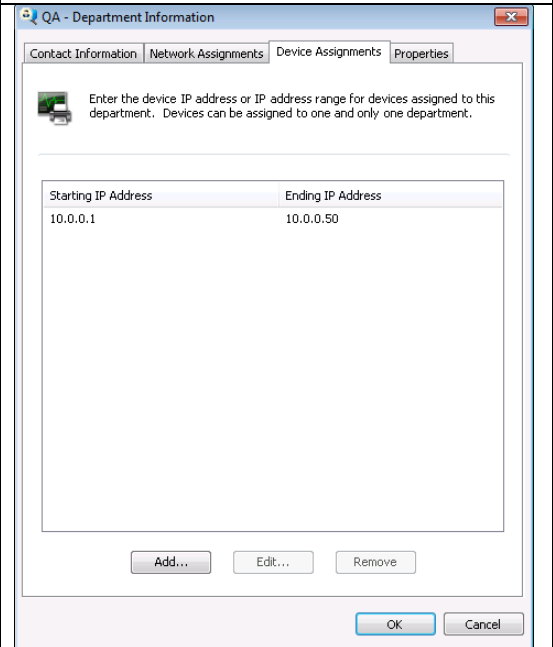
```



```

<!--Example importing printer assignment by range -->
<SiteAudit xmlns="http://tempuri.org/SiteAuditImportSchema.xsd">
  <Import>
    <Organization>
      <Company>
        <CompanyName><![CDATA[My Company]]></CompanyName>
        <Departments>
          <Department>
            <DepartmentName>Engineering</DepartmentName>
            <Departments>
              <Department>
                <DepartmentName>QA</DepartmentName>
                <PrinterAssignment>
                  <Ranges>
                    <Range>
                      <StartAddress>10.0.0.1</StartAddress>
                      <EndAddress>10.0.0.50</EndAddress>
                    </Range>
                  </Ranges>
                </PrinterAssignment>
              </Department>
            </Departments>
          </Department>
        </Departments>
      </Organization>
    </Import>
  </SiteAudit>

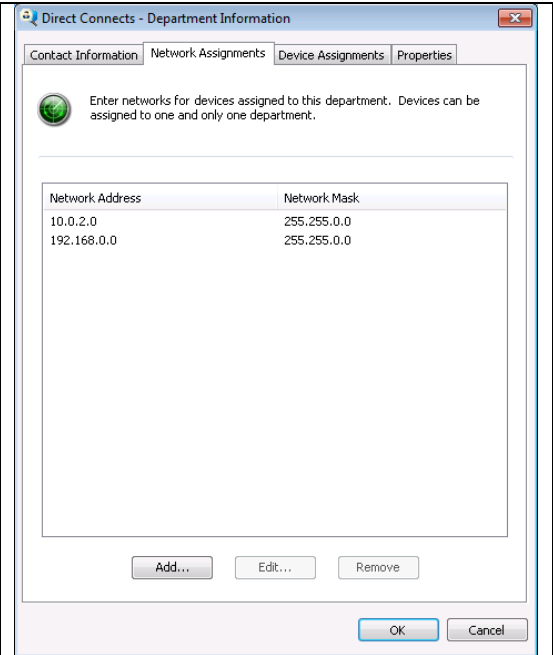
```



```

<!--Example importing printer assignment by network (using CIDR and
network mask-->
<SiteAudit xmlns="http://tempuri.org/SiteAuditImportSchema.xsd">
  <Import>
    <Organization>
      <Company>
        <CompanyName><![CDATA[My Company]]></CompanyName>
        <Departments>
          <Department>
            <DepartmentName>Engineering</DepartmentName>
            <Departments>
              <Department>
                <DepartmentName>QA</DepartmentName>
              </Department>
            </Departments>
          </Department>
          <Department>
            <DepartmentName>Other</DepartmentName>
          </Department>
          <Department>
            <DepartmentName>Direct Connects</DepartmentName>
            <PrinterAssignment>
              <Networks>
                <Network>
                  <NetworkAddress>10.0.2.0</NetworkAddress>
                  <!--CIDR equivalent to 255.255.0.0-->
                  <Mask>/16</Mask>
                </Network>
                <Network>
                  <NetworkAddress>192.168.0.0</NetworkAddress>
                  <!-- Network mask equivalent to CIDR value of /16-->
                  <Mask>255.255.0.0</Mask>
                </Network>
              </Networks>
            </PrinterAssignment>
          </Department>
        </Departments>
      </Company>
    </Organization>
  </Import>
</SiteAudit>

```



Organization Import FAQs

The following list contains frequently asked questions about importing organization data into SiteAudit.

Q: What happens if a device is assigned to multiple departments in an import file?

The printer assignment is unspecified in this case. Users should take care not to assign the same printer to multiple departments in the import document.

Q: What values do optional fields take on if they are not specified in an import file?

Default or blank values are assigned if they are not specified in an import file. Here is a list of default values:

Field Name	Default Value
DowntimeCostPerUserHour	35.00
NumberOfUsers	-1

Q: What is imported if there is an error in my import file?

In the case that there is a validation error during import, no changes will be made to the database and nothing will be imported.

Q: Is it possible to import provisioning and discovery data in the same file as an organization import?

No.

Q: What happens to a device that is assigned to a department via import file printer assignment parameters and then it is manually assigned to a different department via the Printer Assignment dialog?

The device's manual assignment will take precedence because it occurred after the import. Note in the Printer Assignment dialog that when the device is manually moved, there will be a selected checkbox under the "Manually Assigned Department" column to indicate that the device was manually assigned to a department and any network or device assignments for that printer will not take precedence over it. If an import is performed after the manual printer assignment, it will overwrite the manual printer assignment.

Q: If I manually assign networks and ranges to my departments, will the printers automatically go into the department? What about newly discovered printers, will these be automatically assigned to the specified departments?

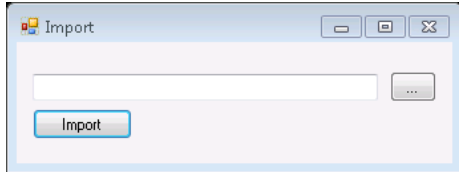
Yes. Once you've entered printer assignments in your Department Information, the printers will automatically move to the department. Be careful not to assign the same printers to more than one department! Also, once any new printers are discovered, they will automatically be placed into the specified department.

Q: Can I just import my company and departments and then fill in the addresses and printer assignments in SiteAudit?

Yes. It is possible to modify any data related to your organization from the SiteAudit Viewer, including assigning printers to departments.

Programmatically Importing a File

Importing a file can also be accomplished programmatically via the **SiteAudit Integration Interface**. This section will explain the requirements to create a simple C# Windows Form program that imports a file.



Required SiteAudit Libraries

The following DLLs will need to be added as references to the project. They are installed with SiteAudit in C:\Program Files\Netaphor\SiteAudit.

- SiteAuditDatabase.dll
- SiteAuditDatabaseServices.dll
- SiteAuditIntegrationImplementation.dll
- SiteAuditIntegrationInterface.dll

Sample code

```
using System;
using System.Diagnostics;
using System.Windows.Forms;
using Palm.Database;
using SiteAudit.Integration;
using SiteAudit.IntegrationImplementation;

namespace ImportSample
{
    public partial class Import : Form
    {
        private IConfigurationImporter m_importer;

        /// <summary>
        /// The implementation of this method will change in versions starting with 4.4.0.0.
        /// </summary>
        private void CreateImporter()
        {
            var databaseConfiguration = IntegrationFactory.CreateCollectionDatabaseConfiguration();

            string message;
            Trace.Assert(databaseConfiguration.LoadDatabaseConfiguration(out message), message);

            m_importer = IntegrationFactory.CreateConfigurationImporter(new
DataAccess(databaseConfiguration.CurrentConnectionString));
        }

        public Import()
        {
            InitializeComponent();
            CreateImporter();
        }

        private void btnImport_Click(object sender, EventArgs e)
```

```

    {
        if (m_importer.Import(tbImportFilePath.Text))
        {
            MessageBox.Show(m_importer.GetLogAsString(), "Import Successful", MessageBoxButtons.OK,
MessageBoxIcon.Information);
        }
        else
        {
            MessageBox.Show(m_importer.GetLogAsString(), "Import Error", MessageBoxButtons.OK,
MessageBoxIcon.Error);
        }
    }

    private void btnFileBrowse_Click(object sender, EventArgs e)
    {
        if (openFileDialog.ShowDialog() == DialogResult.OK)
        {
            tbImportFilePath.Text = openFileDialog.FileName;
        }
    }
}

```