

EMS Floor Plans

Installation, Configuration, & User Guides

V44.1

April 2019

Accruent Confidential and Proprietary, copyright 2019. All rights reserved.

This material contains confidential information that is proprietary to, and the property of, Accruent, LLC. Any unauthorized use, duplication, or disclosure of this material, in whole or in part, is prohibited.

No part of this publication may be reproduced, recorded, or stored in a retrieval system or transmitted in any form or by any means—whether electronic, mechanical, photographic, or otherwise—without the written permission of Accruent, LLC.

The information contained in this document is subject to change without notice. Accruent makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Accruent, or any of its subsidiaries, shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Table of Contents

CHAPTER 1: EMS Floor Plans Installation Guide	1
CHAPTER 2: Introduction to EMS Floor Plans	2
How Do I Implement It?	2
Contact Customer Support	2
CHAPTER 3: Requirements	3
CHAPTER 4: Obtain Floor Plans Installation Files	4
CHAPTER 5: Install or Upgrade the Floor Plans Web Service	5
CHAPTER 6: Install or Upgrade the Floor Plans Configuration Tool	12
CHAPTER 7: Upload, Configure, and View Floor Plans	17
Best Practices	17
Upload and Map Floor Plan Indicators and Diagrams to Rooms in EMS Desktop Client	19
Configure Floor Plan Indicators	20
Configure a Floor Plan Diagram	22
Map a Floor Plan	23
Enable Floor Plans to Show in Your EMS Apps	25
Enable Floor Plans to Show in EMS Web App	25
Enable Floor Plans to Show in EMS Kiosk	25
CHAPTER 8: EMS Floor Plans Configuration Guide	26
CHAPTER 9: Introduction	27
Contact Customer Support	27
CHAPTER 10: Floor Plans Configuration Steps	28

CHAPTER 1: EMS Floor Plans Installation Guide

EMS Floor Plans allows users to search for, view, and reserve available space from an interactive floor plan within [Web App](#) and the [EMS Kiosk App](#).

This EMS Floor Plans Install Guide provides information on the following topics:

- [Introduction](#)
 - [Requirements](#)
- [Obtain Floor Plans Installation Files](#)
- [Install or Upgrade the Floor Plans Web Service](#)
- [Install or Upgrade the Floor Plans Configuration Tool](#)
- [Upload, Configure, and View Floor Plans](#)

See Also: [EMS Floor Plans Configuration Guide](#)

CHAPTER 2: Introduction to EMS Floor Plans

To install and use EMS Floor Plans, you must be licensed for EMS Desktop Client, EMS Web App and/or EMS Kiosk, and EMS Floor Plans. If you are unsure whether your organization has these licenses, or if you would like to learn more about it, please contact your Account Executive.

How Do I Implement It?

The following steps are required to install, configure, and enable EMS Floor Plans:

1. Verify [requirements](#).
2. Install the EMS Floor Plans server components: [EMS Floor Plans Web Service](#) and [EMS Floor Plans Configuration Tool](#).
3. [Upload your floor plan indicators and floor plans](#) in EMS Desktop Client
4. [Map indicators to room locations on your floor plans](#) using the Floor Plans Configuration Utility.
5. [Enable Floor Plans](#) to be displayed on EMS Web App and/or EMS Kiosk App.

Contact Customer Support

- **Option 1 (Recommended):** Search the Knowledge Base available at [Accruent Access](#).
- **Option 2:** Submit a case directly via [Accruent Access](#).
- **Option 3:** Email emssupport@accruent.com.
- **Option 4:** Phone (800) 288-4565.

**Important!**

If you do not have a customer login, register [here](#).

CHAPTER 3: Requirements

Service	.NET	Disk Space
Floor Plans Web Service	4.6.1	2 mb

See Also: [EMS V44.1 System Requirements](#)

CHAPTER 4: Obtain Floor Plans Installation Files

The latest Floor Plan Module components can be downloaded from Accruent Access as follows:

1. Log into [Accruent Access](#).

2. Click **My Products**.

3. Under **EMS**, click **Downloads**.

The downloads page opens in a new browser tab.

4. In the **Software Downloads** area, click the link for your version of software, for example, **V44.1 Releases & Patches**.

A new page opens listing the downloads available based on your license.

5. Download the following files (required for both first-time installations and upgrades).

- **Floor Plan Web Service (EMSRoomDiagrammingService.msi)**

Installation file for the Floor Plan Web Service – a mechanism used by Adobe Flash Player within the Floor Plan Configuration Utility/ EMS Web App/EMS Kiosk and the web server to render floor map images. See [Install or Upgrade the Floor Plans Web Service](#) for more information.

- **Floor Plan Configuration Utility (EMSFloorPlanConfiguration.msi)**

Installation file for the EMS Floor Plan Configuration Utility – a web application used to map indicators to room locations on your floor plans. See [Install or Upgrade the Floor Plans Configuration Tools](#) for more information.

CHAPTER 5: Install or Upgrade the Floor Plans Web Service

**Important!**

There was a breaking security change in [Update 25](#) (May 2018). For more information, please contact [Customer Support](#).

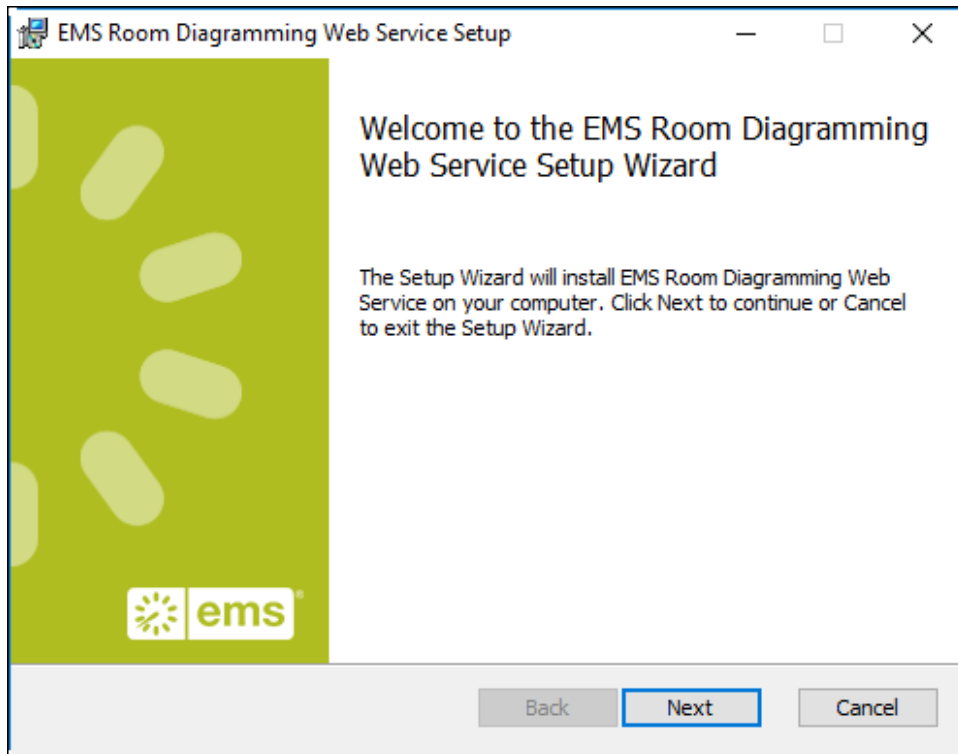
**Important!**

Before beginning the installation process, please do the following:

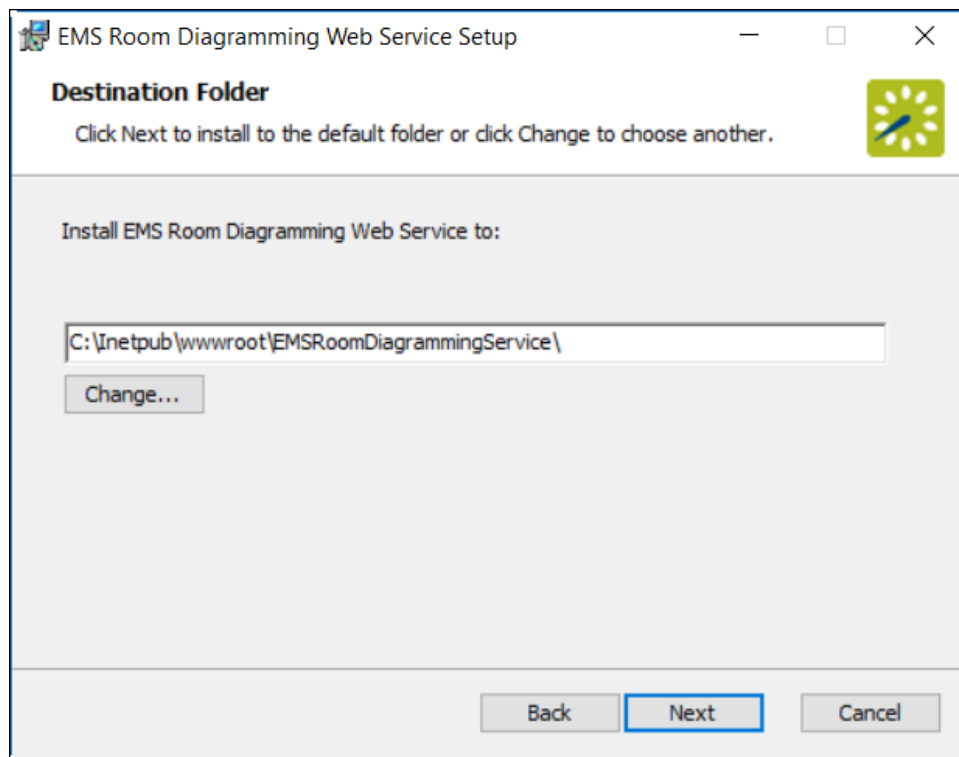
- Install or upgrade your EMS databases as outlined in the EMS Desktop Client Installation Instructions.
- Manually uninstall any previous versions of the Floor Plan Web Service on your web server.

1. Verify that the prerequisite software is installed.
2. Download **EMSRoomDiagrammingService.msi** and **EMSFloorPlanConfiguration.msi** onto the web server (typically the web server that hosts your Virtual EMS/EMS Kiosk web site(s).)
3. Run **EMSRoomDiagrammingService.msi**.
4. The first screen welcomes you to the EMS Room Diagramming Web Service Setup

Wizard. Click **Next** to begin the installation process.

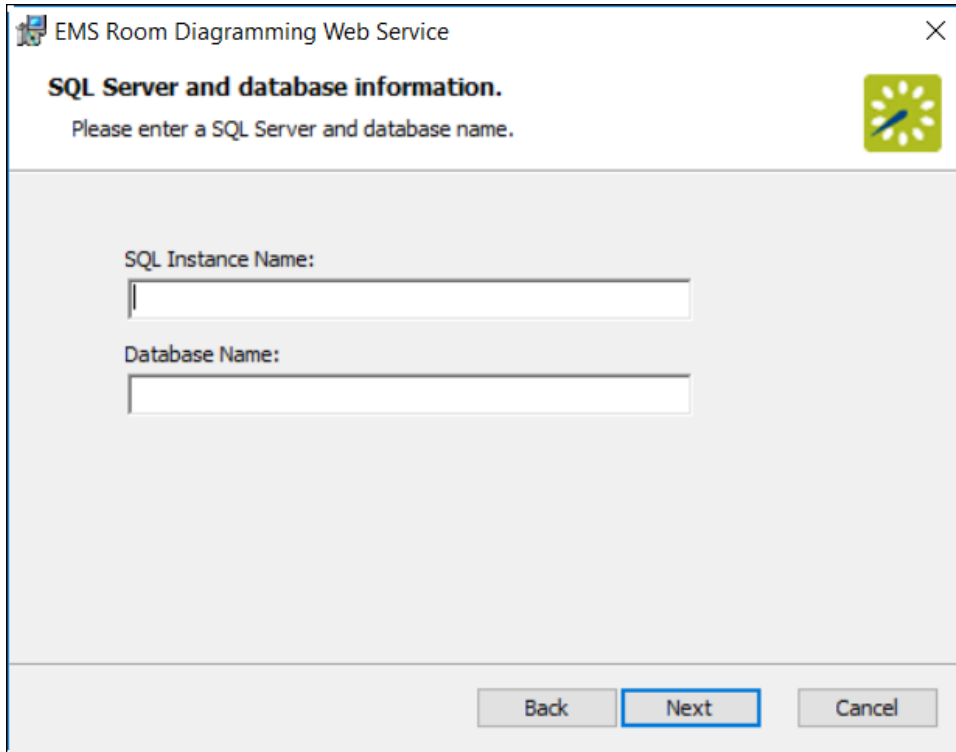


5. The Destination Folder screen will appear.



6. Select the Destination Folder. Click **Next**.

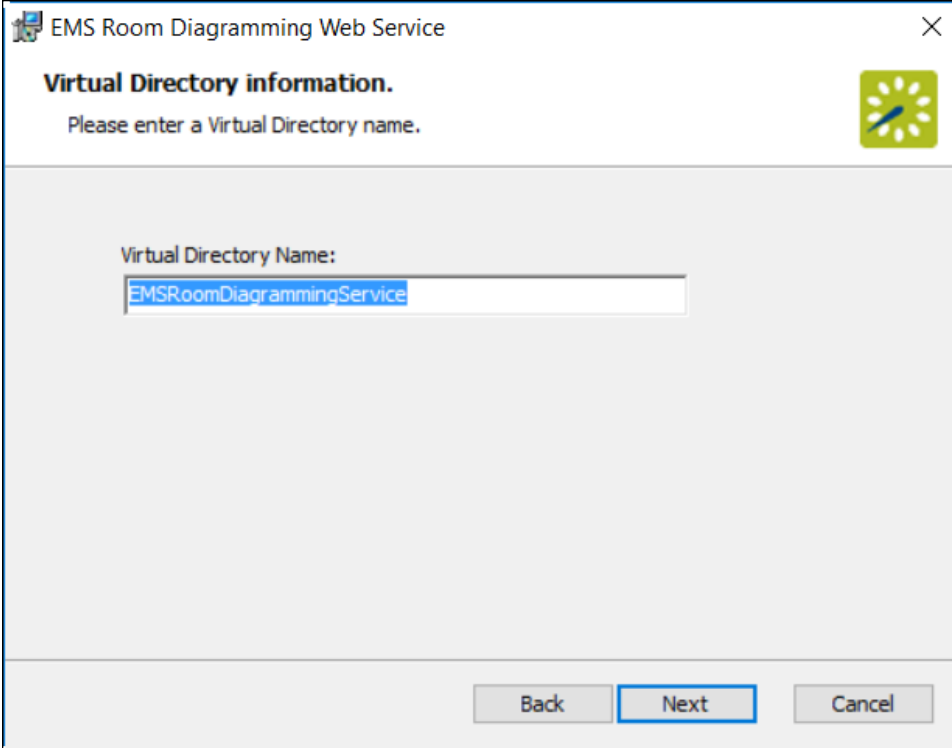
7. The SQL Server and database information screen will appear.



The screenshot shows a Windows-style dialog box titled "EMS Room Diagramming Web Service". Inside the dialog, the text "SQL Server and database information." is displayed in bold, followed by the instruction "Please enter a SQL Server and database name." Below this, there are two input fields: "SQL Instance Name:" and "Database Name:". At the bottom of the dialog, there are three buttons: "Back", "Next", and "Cancel". The "Next" button is highlighted with a blue border.

8. Enter your EMS SQL Server Name and EMS Database Name (typically "EMS").

9. Click **Next**. The Virtual Directory information screen will appear.

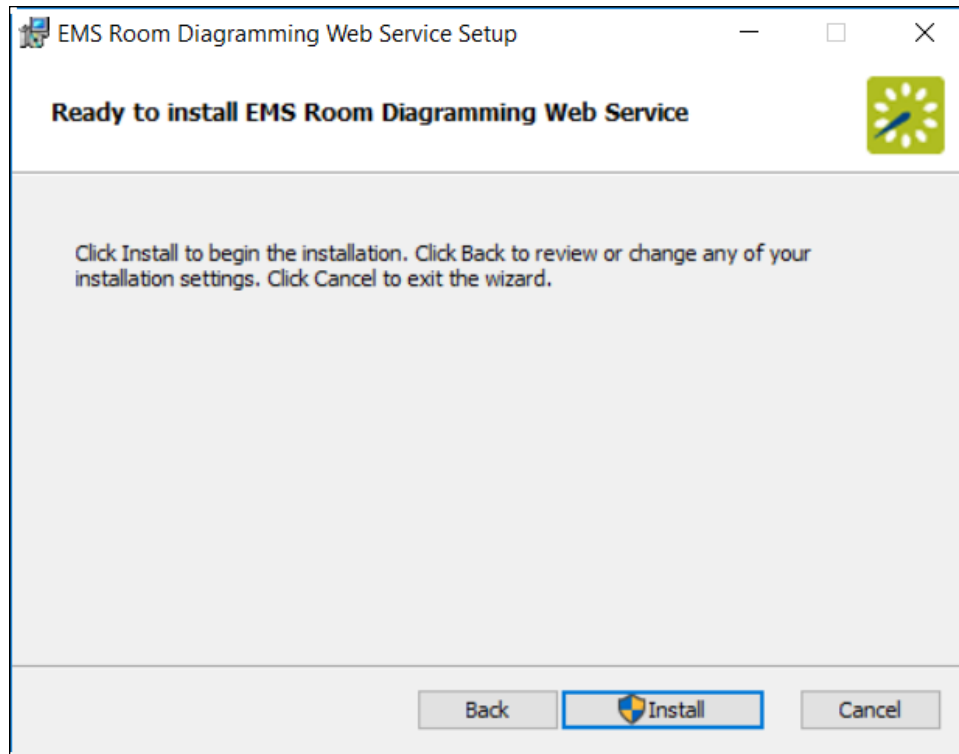


The screenshot shows a window titled "EMS Room Diagramming Web Service" with a close button (X) in the top right corner. Below the title bar, the text "Virtual Directory information." is displayed in bold, followed by the instruction "Please enter a Virtual Directory name." To the right of this text is a green square icon with a white clock face. Below the instruction is a text input field labeled "Virtual Directory Name:" containing the text "EMSRoomDiagrammingService". At the bottom of the window are three buttons: "Back", "Next" (which is highlighted with a blue border), and "Cancel".

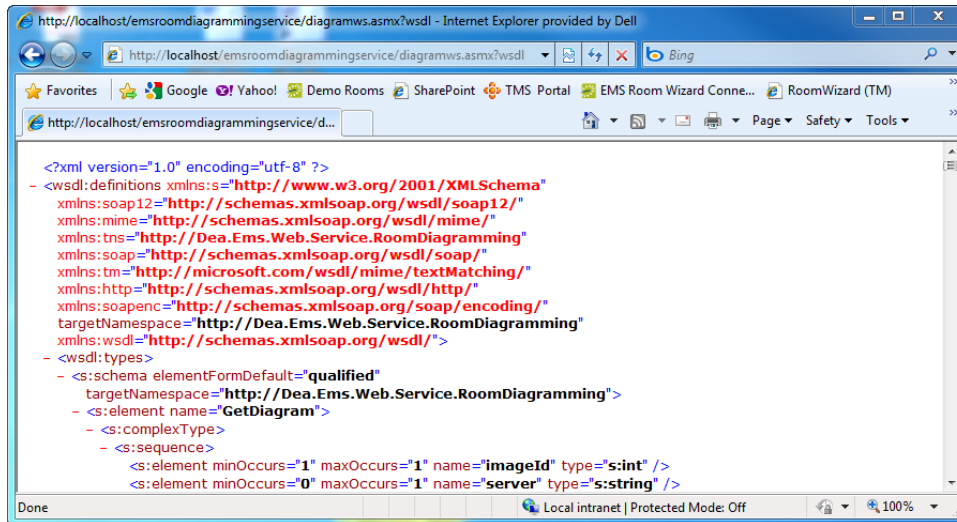
**Note:**

The EMS Room Diagramming Web Service should not be installed in the same Virtual Directory as other EMS web-based products.

10. Click **Next**. The Ready to install ... screen will appear.



11. Click **Install** to begin the installation. Once complete, the Installation Complete screen will appear.
12. Click **Close**.
13. After following the steps above, verify your installation by opening a browser and entering the following URL:
http://[ServerName]/EMSRoomDiagrammingService/DiagramWS.asmx?WSDL (replace [ServerName] with the name of your web server)
Your browser should return XML.



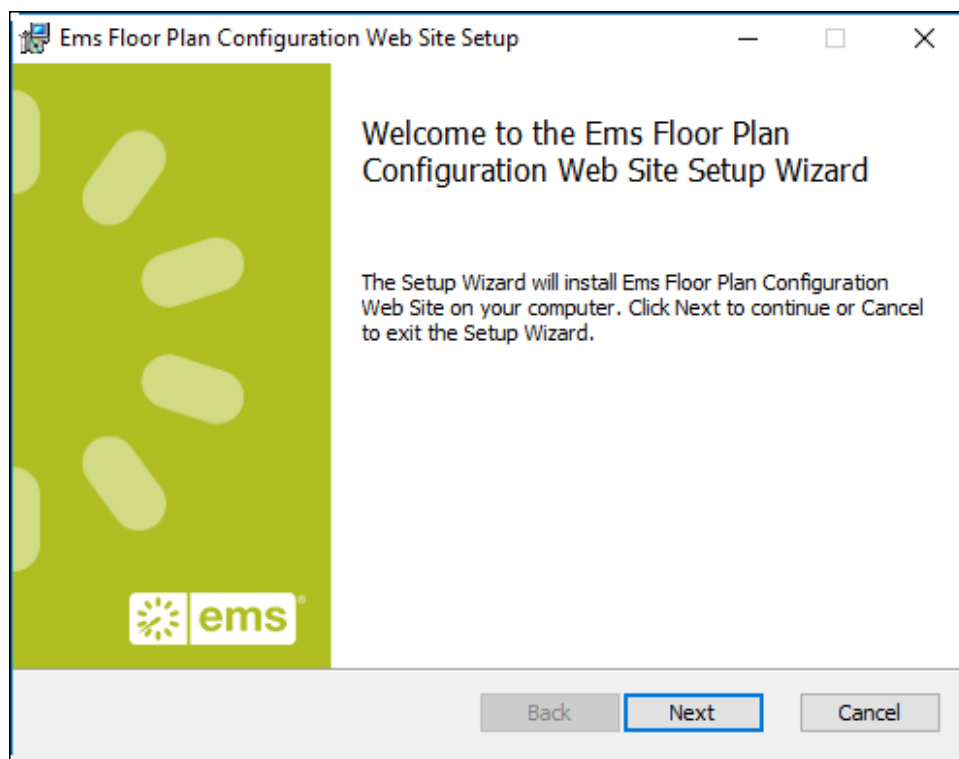
CHAPTER 6: Install or Upgrade the Floor Plans Configuration Tool



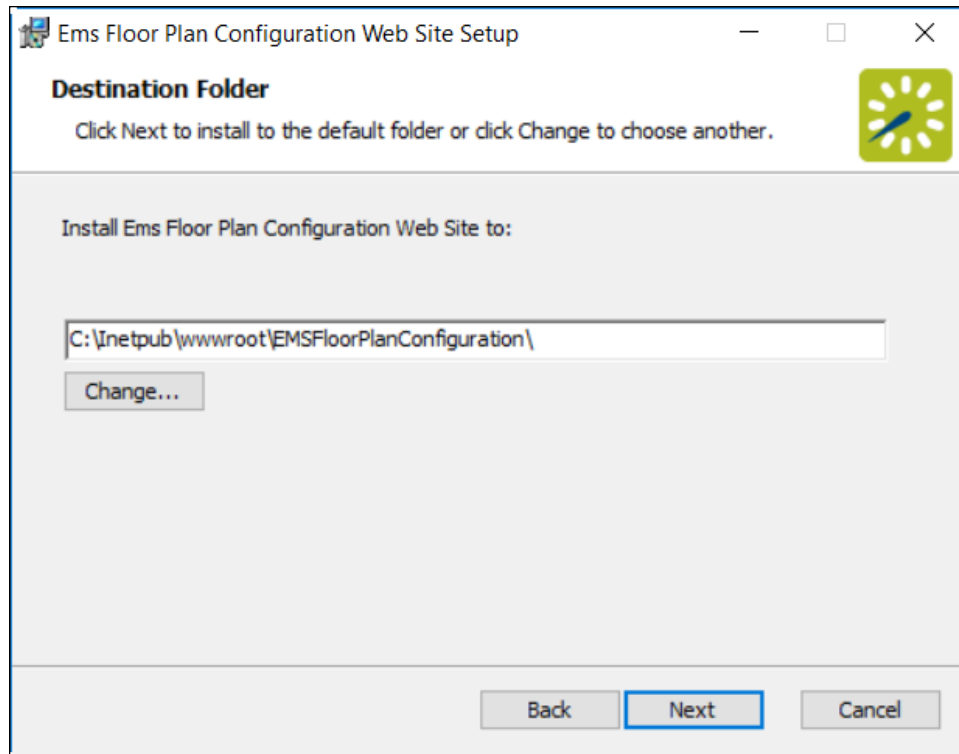
Important!

Before beginning the installation process, please manually uninstall any previous versions of the Floor Plan Configuration Tool on your web server.

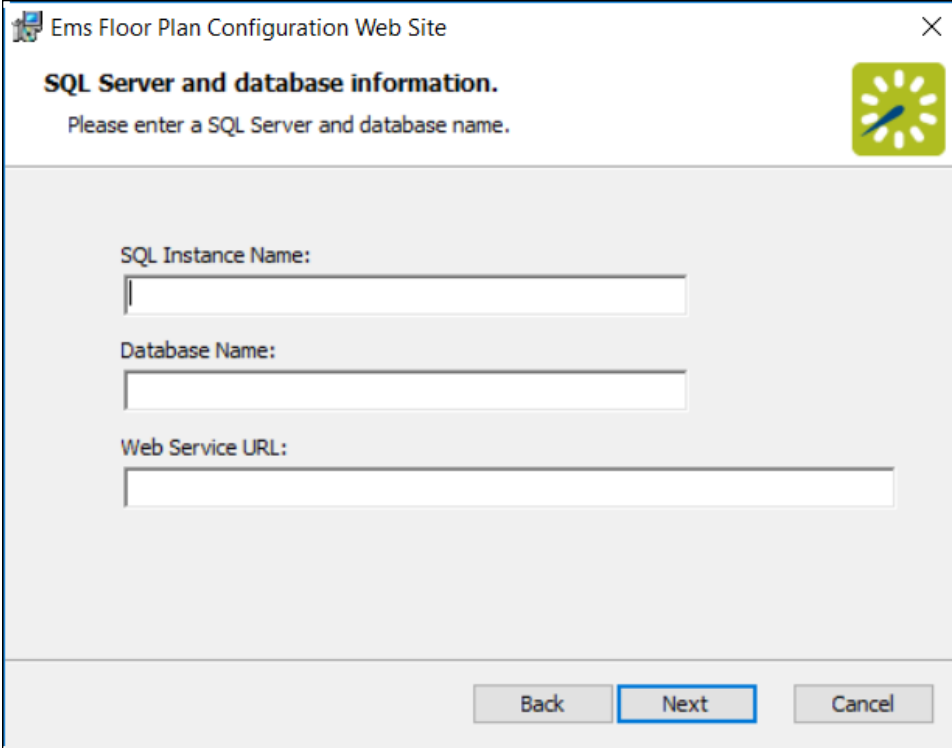
1. Run **EMSFloorPlanConfiguration.msi**. The first screen welcomes you to the EMS Floor Plan Configuration Website Setup Wizard.



2. Click **Next** to begin the installation process. The Destination Folder screen will appear.

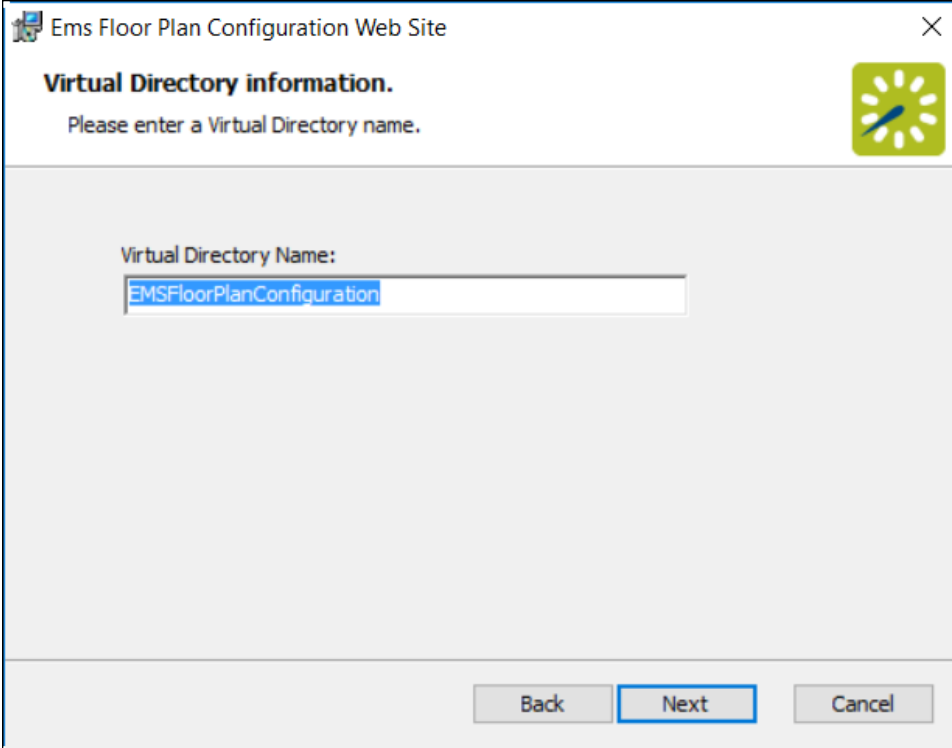


3. Click **Next**. The SQL Server and database information screen will appear.



4. Enter your SQL Instance Name, Database Name (typically "EMS") and Web Service URL (as configured in [Install Floor Plan Web Service](#)).

5. Click **Next**. The Virtual Directory screen will appear.



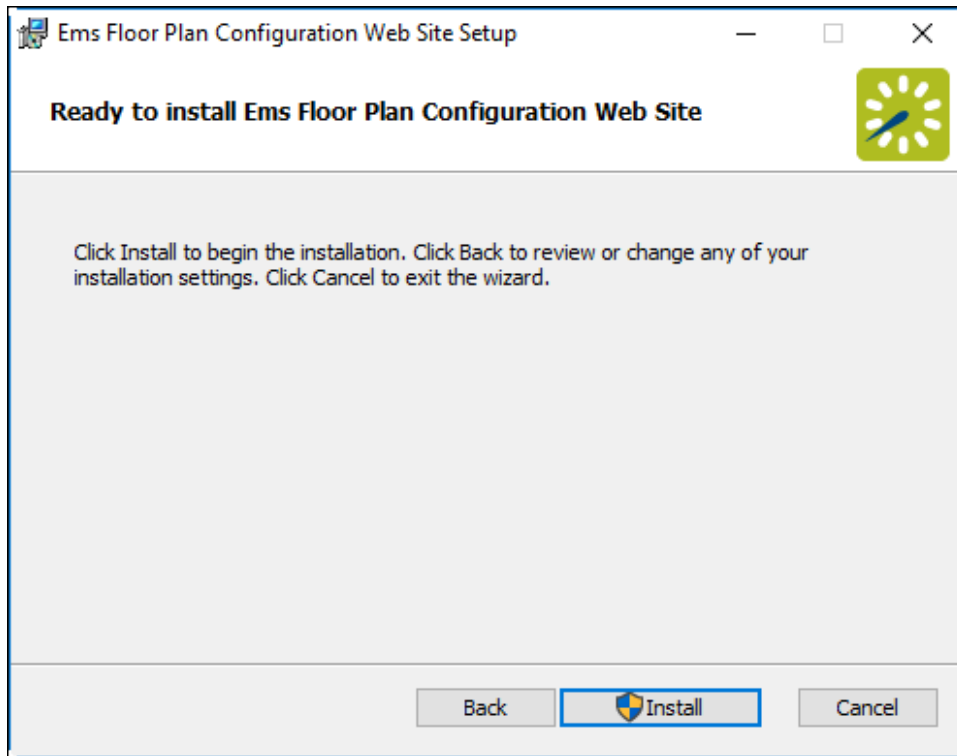
The screenshot shows a web browser window titled "Ems Floor Plan Configuration Web Site". The main heading is "Virtual Directory information." with a subtext "Please enter a Virtual Directory name." and a green circular icon with a pencil. Below this is a text input field labeled "Virtual Directory Name:" containing the text "EMSFloorPlanConfiguration". At the bottom of the window are three buttons: "Back", "Next" (which is highlighted with a blue border), and "Cancel".

6. Enter a Virtual Directory Name.

**Note:**

The EMS Floor Plan Configuration site should not be installed in the same Virtual Directory as other EMS web-based products. The installation process will create a Virtual directory on your web server named "EMSFloorPlanConfiguration" (or the name you entered in the Virtual Directory field.)

- Click **Next**. The Ready to Install... screen will appear.



- Click **Install**. Once complete, the Installation Complete screen will appear.
- Click **Close**.
- After following the steps above, verify your installation by opening a browser and entering the following URL:
http://[ServerName]/emsfloorplanconfiguration (replace [ServerName] with the name of your web server).

CHAPTER 7: Upload, Configure, and View Floor Plans

This topic provides information on the following:

- [Best Practices](#)
- [Upload and Map Floor Plan Indicators and Diagrams to Rooms in EMS Desktop Client](#)
- [Configure Floor Plan Indicators](#)
- [Configure a Floor Plan Diagram](#)
- [Map a Floor Plan](#)
- [Enable Floor Plans to Show in Your EMS Apps](#)
 - [Enable Floor Plans to Show in EMS Web App](#)
 - [Enable Floor Plans to Show in EMS Kiosk](#)

Best Practices

Display settings and other environmental factors greatly affect the performance of EMS Floor Plans.

For an optimal floor plan experience, please adhere to the following best practices:

Display Component	Recommended Setting
Monitor Resolution	1920 x 1080
Monitor Size	13" or 23"
Monitor Screen Ratio	16 : 9
Indicator Size	Medium (24 x 24 pixels)
Browser Zoom	100%



Note:

Floor plan indicators do **not** scale when you zoom in and out of the floor plan.

Floor Plan Image Max/Min Resolution and Aspect Ratio Recommendations

Monitor Dimension	Resolution	Maximized Browser Size	Browser Size: 75%	Browser Size: 50%
13" Laptop Monitor	934 x 491	Ideal Indicator Display:	Ideal Indicator Display:	Potential overlapping Indicators:

Monitor Dimension	Resolution	Maximized Browser Size	Browser Size: 75%	Browser Size: 50%
		<ul style="list-style-type: none"> • Edge • Chrome • IE 	<ul style="list-style-type: none"> • Edge • Chrome • IE 	<ul style="list-style-type: none"> • Edge • Chrome • IE
13" Laptop Monitor	1030 x 469	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
13" Laptop Monitor	871 x 495	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
13" Laptop Monitor	1244 x 298	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
23" HP HD Monitor	934 x 491	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
23" HP HD Monitor	1030 x 469	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE

Monitor Dimension	Resolution	Maximized Browser Size	Browser Size: 75%	Browser Size: 50%
23" HP HD Monitor	871 x 495	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
23" HP HD Monitor	1244 x 298	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
23" HP HD Monitor	934 x 408	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Potential overlapping Indicators: <ul style="list-style-type: none"> • Edge • Chrome • IE
23" HP HD Monitor	745 x 439	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE
23" HP HD Monitor	745 x 178	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE 	Ideal Indicator Display: <ul style="list-style-type: none"> • Edge • Chrome • IE

Upload and Map Floor Plan Indicators and Diagrams to Rooms in EMS Desktop Client

Using the Floor Plan Configuration Utility, map indicators to room locations on your floor plans.

This optional feature, enabled with an EMS Floor Plans license, allows users to view available rooms and book a space directly from a floor plan image in EMS Web App or EMS Kiosk.

Concept: Configuring floor plans in the Floor Plan module is a three step process.

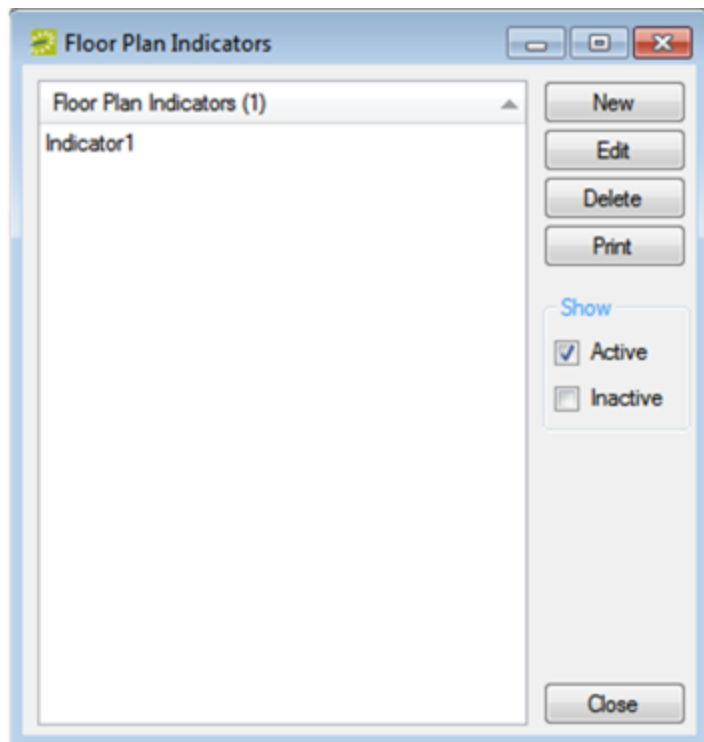
1. *Configure the floor plan indicators* (the images used indicate whether a room is available or unavailable for a floor plan). For example, you might use something as simple as a green square to indicate that a room on a floor is available and a red square to indicate that a room on a floor is unavailable.
2. *Configure a floor plan diagram* for each floor of each building for which a floor plan applies. A floor plan diagram is a drawing, or outline, usually to scale, that shows the relationships between rooms, spaces, and other physical features for one floor of a building.
3. *Map your floor plan indicators* to rooms on your diagrams using the Floor Plan Configuration utility.

The availability of each reservable space ultimately determines the indicator (available or unavailable) that shows on a floor plan in EMS Web App or EMS Kiosk.

Configure Floor Plan Indicators

1. On the EMS menu bar, click **Configuration > Facilities > Floor Plan Indicators**. The Floor Plan Indicators window opens, listing active indicator sets currently configured in your EMS database.

Floor Plan Indicators Window



Recommended Display Settings

**Note:**

To see all indicator sets regardless of status, under Show, click **Inactive**.

2. Click **New**. The Floor Plan Indicator dialog box opens.

Floor Plan Indicator Dialog

3. In the Description field, enter a name or description for the new floor plan indicators (max 50 characters including spaces). You can name indicators something as simply as Indicator Set 1, or if you are using different indicators for different floor plans in different buildings, you could identify them by building, for example, Memorial Student Union indicators, Fifth Floor Conference Room indicators, and so on.
4. Next to the Image field, click **Search** to browse to and select an image to use for the *available* indicator.
5. Next to the Secondary Image field, click *Search* to browse to and select an image to use for the *unavailable* indicator.

**Note:**

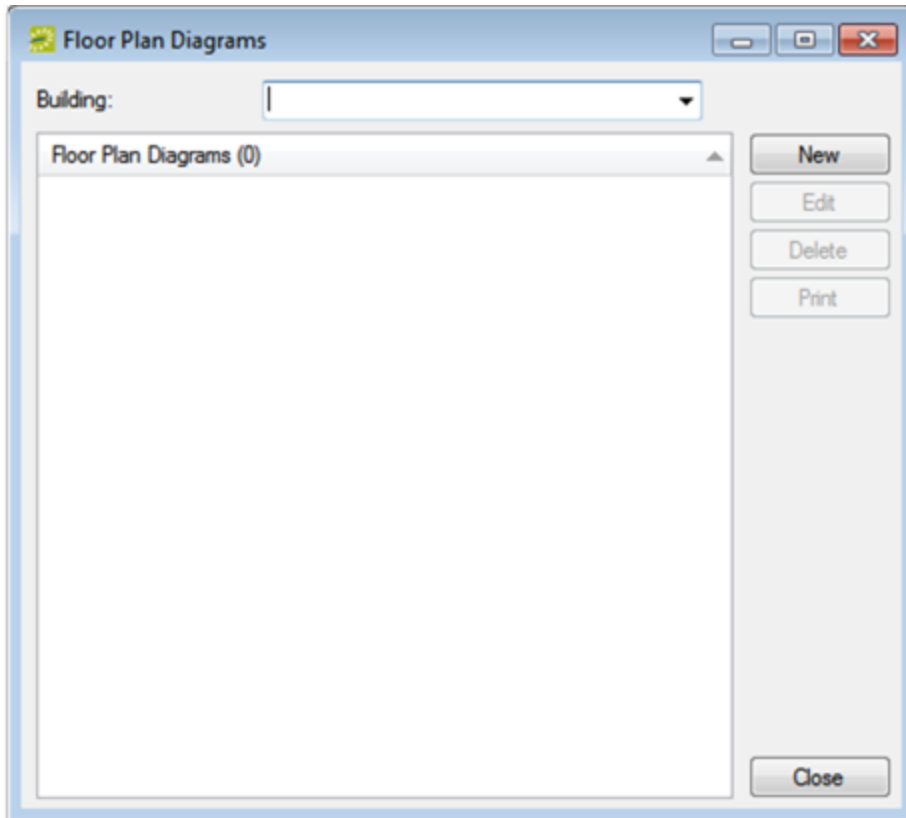
The image must be in .png, .jpg, .jpeg, .jpe, .jfif, or .svg format.

6. Click **OK**. Your new floor plan indicators are added as active. Optionally, select Inactive to deactivate the set.

Configure a Floor Plan Diagram

You must configure one floor plan diagram for each floor that will be available for booking in EMS Web App and the EMS Kiosk.

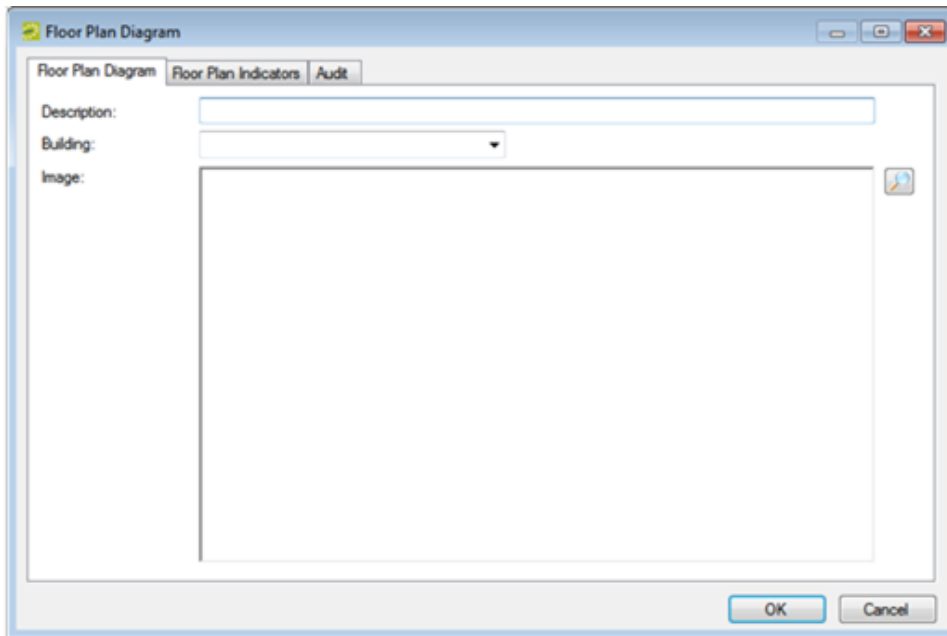
1. On the EMS menu bar, click **Configuration > Facilities > Floor Plan Diagrams**. A blank Floor Plan Diagrams window opens.



Floor Plan Diagrams Window

2. Optionally, in the Building dropdown list, select (all), or select a specific building to see a list of floor plans for all buildings or for the selected building in the window.

3. Click **New**. The Floor Plan Diagram dialog box opens on **Floor Plan Diagram** tab.



Floor Plan Diagram Tab in the Floor Plan Diagram Dialog

4. In the Description field, enter a name or description for the new floor plan diagram (maximum of 50 characters, including spaces).
5. On the Building dropdown list, select the building for which you are configuring the floor plan diagram.
6. Next to the Image field, **Search** to browse and select the image to use for the floor plan diagram.

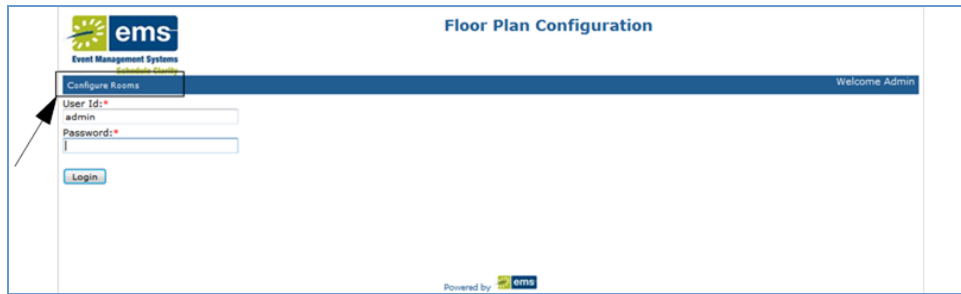
**Note:**

Image files must be .png, .jpg, .jpeg, .jpe, .jfif, or .svg. Optimal image size is 1024 x 768.

7. Open the **Floor Plan Indicators** tab, and on the Available list, select the floor plan indicator (CTRL-click to select multiple floor plan indicators) you want to use for this diagram, and then Move (>) to the Selected list.
8. Click **OK**. The Floor Plan Diagram dialog box closes and you return to the Floor Plan Diagrams window with the newly configured floor plan diagram automatically selected.

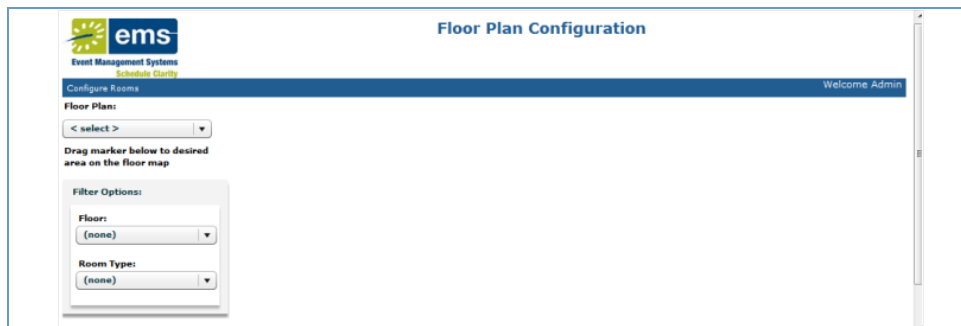
Map a Floor Plan

1. Log in to the Floor Plan Configuration module. The Configure Rooms option shows above the Login fields on the main window.



Floor Plan Configuration Module, Main Window with Configure Rooms Option

2. Click **Configure Rooms**. The Configure Rooms page opens.



Floor Plan Configuration Module, Configure Rooms Page

3. On the Floor Plan dropdown list, select a floor plan diagram. The available indicators that are associated with the floor plan diagram are displayed below the selected diagram.
4. Drag an available indicator and place it as needed to indicate where a room (reservable space) is located on the floor.
5. Repeat Step 4 until you have identified all the reservable spaces on the floor.
6. For each indicator, do the following:
 - Click on the indicator to open a Room Details dialog box.
 - On the Rooms dropdown list, select the room for the indicator, and then click **Save**.

**Note:**

Once an indicator is dropped on the floor plan, users will be prompted to filter by room type and floor. To ensure a room is assigned to an indicator, users must select a room. Click **Save**. Only indicators assigned to a room will display in the EMS Web App or EMS Kiosk App.

7. Close the Floor Plan Configuration module.

Enable Floor Plans to Show in Your EMS Apps

Once your floor plans have been configured, you can then enable them to display to users in the web apps your organization has licensed.

Enable Floor Plans to Show in EMS Web App

1. Go to **System Administration > Settings > Parameters > Everyday User Applications** tab and locate the parameter, *"Floor Plan Web Service URL"*.
2. Enter the URL of your Floor Plan Web Service (see [Install Floor Plan Web Service](#) for more information).
3. Check that the **View Floor Map** Web Security Template Role is granted (within **Configuration > Web > Web Security Template**).

Enable Floor Plans to Show in EMS Kiosk

1. Go to **System Administration > Settings > Parameters > Kiosk** tab and locate the parameter, *"Floor Plans – Floor Plan Web Service URL"*.
2. Enter the URL of your Floor Plan Web Service (see [Install Floor Plan Web Service](#) for more information).

CHAPTER 8: EMS Floor Plans Configuration Guide

The EMS Floor Plans module allows users to search for, view, and reserve available space from an interactive floor plan within the [EMS Web App](#) and the [EMS Kiosk App](#).

This EMS Floor Plans Configuration Guide provides information on the following topics:

- [Introduction](#)
- [Floor Plans Configuration Steps](#)

See Also: [EMS Floor Plans Installation Guide](#)

CHAPTER 9: Introduction

To configure and use EMS Floor Plans, you must be licensed for EMS Desktop Client, EMS Web App and/or the EMS Kiosk, and the Floor Plan Module. If you are unsure whether or not your organization is licensed for this module, or if you would like to learn more about it, please contact your Account Executive.

To configure EMS Floor Plans, you will:

1. Verify that you have installed all the necessary EMS Floor Plans server components. See [EMS Floor Plans Installation Guide](#).
2. [Upload your floor plan indicators and floor plans](#) in EMS Desktop Client.
3. [Map indicators to room locations on your floor plans](#) using the Floor Plans Configuration Utility.
4. [Enable Floor Plans](#) to be displayed on EMS Web App and/or EMS Kiosk App.

Contact Customer Support

- **Option 1 (Recommended):** Search the Knowledge Base available at [Accruent Access](#).
- **Option 2:** Submit a case directly via [Accruent Access](#).
- **Option 3:** Email emssupport@accruent.com.
- **Option 4:** Phone (800) 288-4565.

**Important!**

If you do not have a customer login, register [here](#).

CHAPTER 10: Floor Plans Configuration Steps

1. Within EMS, upload your floor plan indicators and floor plans as outlined in the [EMS Desktop Client Configuration Guide: Configuring Floors](#).

**Note:**

Optimal floor plan image resolution is 1024 x 768. Valid file types are .png, .jpg, .jpeg, .jpe, or .jiff.

2. Using the Floor Plan Configuration Utility, map indicators to room locations on your floor plans.
3. To enable the Floor Plan Module for use with EMS Web App, go to **System Administration > Settings > Parameters > Everyday User Applications** and locate the parameter – ‘*Floor Mapping – Floor Mapping Web Service URL*’. Enter the URL of your Floor Plan Web Service (see [Install Floor Plan Web Service](#)).
4. The **View Floor Map** Web Security Template Role must be granted (within **Configuration > Web > Web Security Template**) in order for web users to see an interactive floor map on EMS Web App.
5. To configure the Floor Plan Module for use with the EMS Kiosk (optional module), go to **System Administration > Settings > Parameters > Everyday User Applications** and locate the parameter – ‘*Floor Plans – Floor Plan Web Service URL*’. Enter the URL of your Floor Plan Web Service (see [Install Floor Plan Web Service](#)).

EMS Floor Plans - April 2019

Accruent, LLC

11500 Alterra Parkway

Suite 110

Austin, TX 78758

www.accruent.com