



Add-On Products

# Digital Sign Service

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## Administrator Guide

**For DSS4.2**

**Version: 03**

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# Table of contents

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Table of contents .....	2
CHAPTER 1 .....	3
Introduction .....	3
Terminology List .....	4
Digital Sign Service Overview .....	4
CHAPTER 2 .....	5
How to configure DSS for Server .....	5
Digital Sign Service Manager Overview .....	5
Dashboard .....	6
Reports .....	7
System & Configuration .....	7
Basic configuration .....	7
1. Load a license .....	7
2. Establish connections .....	9
3. Configure Outputs .....	11
4. Add resources .....	14
5. Make advanced settings for the Digital Sign Service .....	15
6. Configure devices to be used with DSS Client .....	21
Other configurations in DSS Manager .....	29
Advanced .....	29
Administrators .....	30
Categories .....	31
Parameters .....	31
SQL .....	32
Logging .....	34
Information .....	34
Resource Types .....	35
Incident types .....	37
Screen templates .....	37
Card Holders (Users) .....	39

## CHAPTER 1.

# Introduction

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This Administrator Guide is intended for system administrators and describes how to set up Digital Sign Service.

The document consists of the following chapters:

- [Introduction](#) giving you the structure of the document as well as an overview of the Digital Sign Service software.
- [How to configure DSS for Server](#) chapter provide you steps that you need to follow in order to setup the DSS software.

In this chapter:

- Definitions, Acronyms and Abbreviations
- Digital Sign Service Overview

## Terminology List

Term	Definition
AD (Active Directory)	Service that provides the means to manage the identities and relationships that make up network environments.
Destination store	The place to where Digital Sign Service put the xml file extracted from Exchange Server. In this version of Digital Sign Service, Destination Store is Ftp Server, file server or ISS
Digital Sign Service (DSS)	Digital Sign Service is a software designed to collect data from Exchange Server and store it in a specific location as well as update data on Exchange Server when receiving request.
Exchange Connector	The system which can use the xml output from DSS. Digital signs assigned to those systems read the content of the XML files. In this case appointment content for multiple calendar accounts are stored in one XML
Group or distribution list	List of users joined together as one entity. Created in AD or on Exchange Server.
IIS (Internet Information Service)	A Web server with integrated, reliable, scalable, secure, and manageable capabilities available over an intranet, the Internet, or an extranet, and is a tool for creating a strong communications platform for dynamic network applications.
Microsoft .NET Framework	A set of Microsoft software technologies for connecting information, people, systems, and devices. It enables a high level of software integration through the use of Web services: small, discrete, building-block applications that connect to each other as well as to other, larger applications over the Internet.
Microsoft Exchange Server	Server software enabling you to send and receive electronic mail and other forms of interactive communication through computer networks.
UTC (Coordinated Universal Time)	Equivalent to mean solar time at the prime meridian, formerly expressed in GMT.

## Digital Sign Service Overview

The two main purposes of Digital Sign Service are:

- To extract appointment information from assigned Microsoft Exchange calendar accounts and place this information in standard XML files, so they can be used for further processing by digital signage.
- To collect user input from digital signs. Based on this input, DSS can modify the content of assigned MS Exchange calendar accounts.

The basic DSS components are as follows:

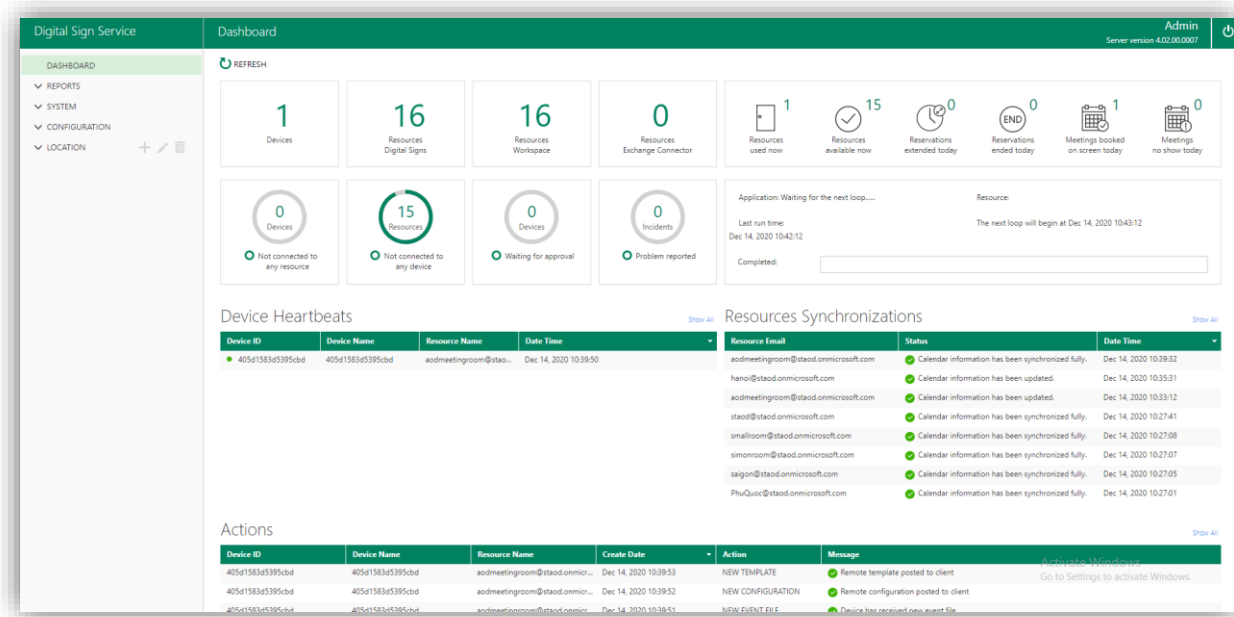
- **Digital Sign Service Manager** (A graphical frontend)
- **Digital Sign Service v4** (Extracts appointments from Exchange. Creates corresponding XML files)
- **Digital Sign REST Service** (Writes appointments into Exchange. Receives requests from Digital Signs. Updates output XML files and content for the signs)

CHAPTER 2.

# How to configure DSS for Server

## Digital Sign Service Manager Overview

Digital Sign Service Manager is the graphical frontend used to configure the Digital Sign Service components. This section contains a brief introduction to it.



**Figure 1. DSS Manager User Interface**

Digital Sign Service Manager provides the ability to configure synchronization settings for a particular destination. Likewise, it can be used for specifying common settings applied to Digital Signs.

Digital Sign Service Manager includes options for selecting distribution lists to be used in synchronization.

User can book a new meeting if the text “Available” appears on the screen, and the Status banner is green. This is also the initial screen view of the user interface.

Digital Sign Service Manager interface pane features 3 sections:

- **Dashboard** – this section features overview of the system and how resources/devices are operating
- **Reports** – this section features reports that cover all operations of the system.
- **System & Configuration** – these sections feature common settings for all Digital Sign Service system to provide DSS with the ability to connect to Exchange Server to retrieve data and save it in an XML file. See the **System Configuration** section of this document for more details.
- **Location** – this section provides support information on the devices and resources, which allow you manage device groups and make changes to resources.

## Dashboard

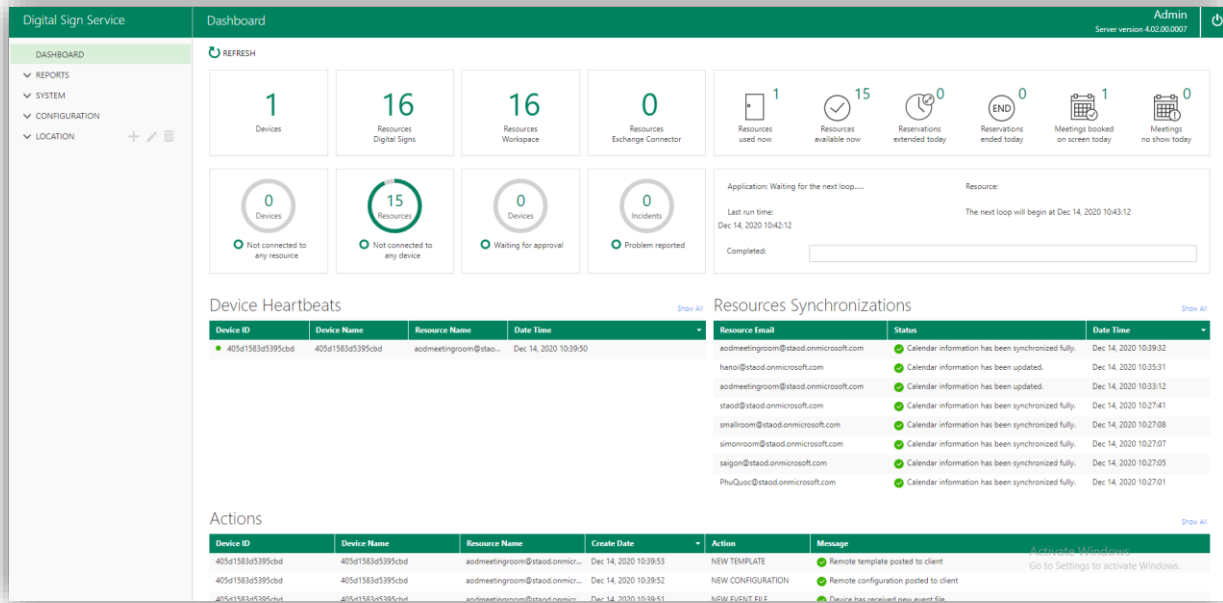
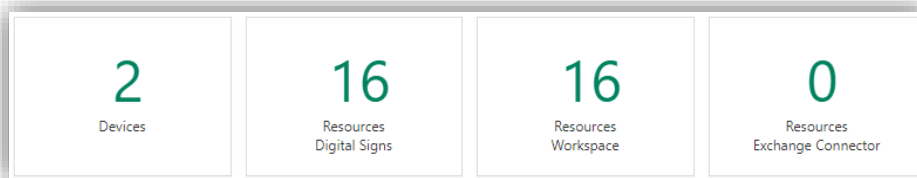


Figure 2. Dashboard section

This section provides an overview of the system and how resources/devices are operating.

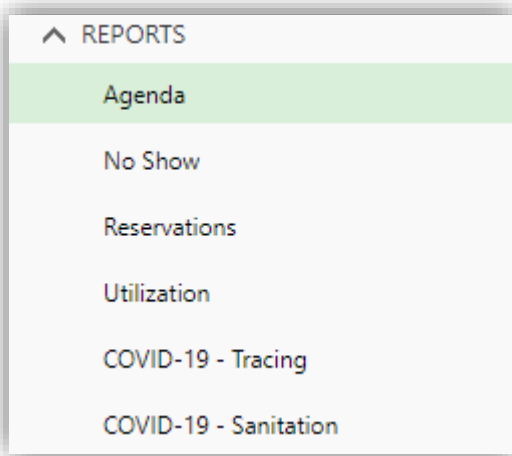
The top area contains information of number of devices, added/used resources and what happen with them today. The **Device Heartbeats** and **Resources Synchronizations** provide status of resources. **Actions** area describes what actions have been done on the devices.

You can have a shortcut to go to other pages by clicking specific positions on this screen:



- Click on the number above “**Devices**”: Go to **Devices** page
- Click on the number above “**Resources Digital Signs**”, “**Resources Workspace**” and “**Resources Exchange Connector**”: Go to **Resources** page

## Reports



This section provides 6 types of reports. Each of these reports can be used to serve your specific purposes.

## System & Configuration

These navigation pane items open an interface section where the parameters related to all applications with Digital Sign data are specified. These sections enable Digital Sign Service to connect to the Exchange Server and synchronize items to necessary stores. This pane includes the following sections:

- **SYSTEM**
  - [License](#)
  - [Connections](#)
  - [Advanced Settings](#)
  - [Outputs](#)
  - [Administrators](#)
- **CONFIGURATION**
  - [Devices](#)
  - [Resource Types](#)
  - [Resources](#)
  - [Screen Templates](#)
  - [Card Holders \(Users\)](#)

## Basic configuration

### 1. Load a license

Synchronization to destination stores performed by DSS cannot take place without a license file permitting this operation. The service will stop, if the license has expired.

By default, the product is shipped with a demo license valid for a 30-day trial period. When the trial period is over, the application displays a warning message and stops functioning. A full license can be purchased from your vendor. Visit [www.add-on.com](http://www.add-on.com) for more details.

If you have obtained a valid license, you will need to manually upload it.

To upload the acquired license file, follow the steps described below:

1. Once you have got the license file, go to System → License. Click **Upload License** button.
2. Browse to the directory where your license file is located. Select the file and click Open.
3. The license will be now loaded for your copy of DSS.

The **License** section is shown in the figure below:

Digital Sign Service	License
DASHBOARD	UPLOAD LICENSE
▼ REPORTS	This product is licensed to
▲ SYSTEM	Exchange Connector Resources
License	<b>Max_for3</b> 2147483647 (0 resources)
Connections	License Number
Settings	DSS1-4388-8635-7953
Outputs	Type
Logging	<b>Normal</b> Workspace Resources
Administrators	Expiry date
	<b>No Expiry</b> 2147483647 (16 resources)

**Figure 3. License Section**

The **License Number** and **Type** columns contain the respective information on the license number and type (demo, Limited-time or full).

The Total column of the License section indicates the number of allowed user calendars in the license file. If the total number of user calendars selected in group sections of Exchange Connector or Digital Signs exceeds the total number of users allowed in the license file, DSS Manager will show a warning message and will not allow more users to be selected.

The number out of brackets in Exchange Connector Resources and Digital Sign Resources indicates the number of allowed user calendars in the license file. The number in the brackets depicts the number of used licenses (resources added). If the total number of user calendars selected in Exchange Connector and Digital Signs exceeds the total number of users allowed in the license file, Digital Sign Service Manager will show a warning message and will not allow more users to be selected.

The **Expiry date** column can contain a particular date on which the license will expire.



## 2. Establish connections

In this section you can add multiple Domain Controllers and On-Premise Exchange Servers by clicking the **[Exchange On-Premise]** button on the toolbar. But you can only add one Online Exchange Server. If you already added it, the **[Exchange Online]** button will be blurred.

In the **Domain Controller** field, enter the Active Directory machine address.

For **Exchange Server**:

Enter the Name of Client Access Server (CAS) or Name of Exchange Server where appointments are to be got from.

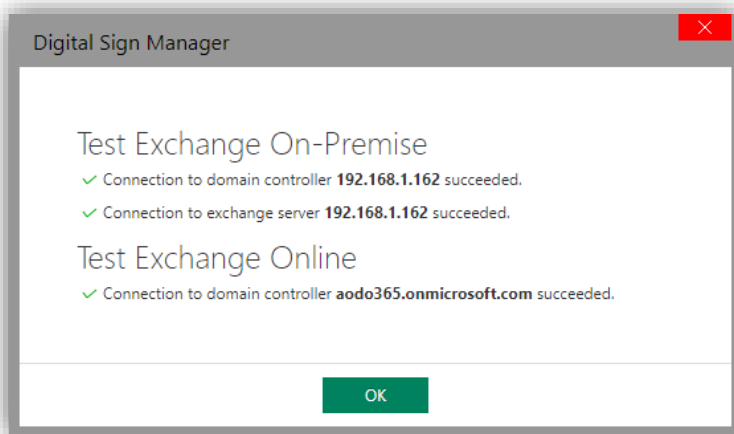
The service account to be used here must be granted impersonate permission. For information about how to set necessary permission for the account, refer to the [KB0021 - Steps to configure Application Impersonation rights in Exchange Servers](#).

**NOTE:** User name for Domain Controller/Exchange Server must be only the account name (e.g. johnsmith). Any other formats (such as **abc\johnsmith** or [johnsmith@abc.com](#)) are not accepted.

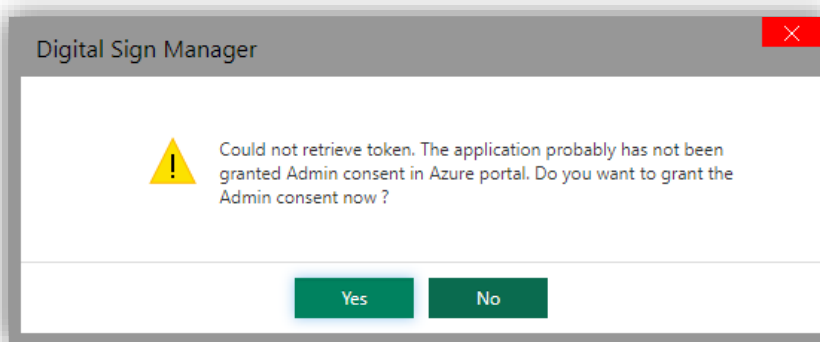
If **Exchange Online** is selected, you need to create application on Azure portal and retrieve details to fill in here. For more details, please refer to this [Knowledge Base Article](#).

You can test the correctness of the specified access parameters for the Exchange Server by clicking **[Test]** button (you might be required to provide the **User Name** and **Password** again).

If you click **[Test]** button and the application has been granted Admin consent in Azure portal, the following message shows up:



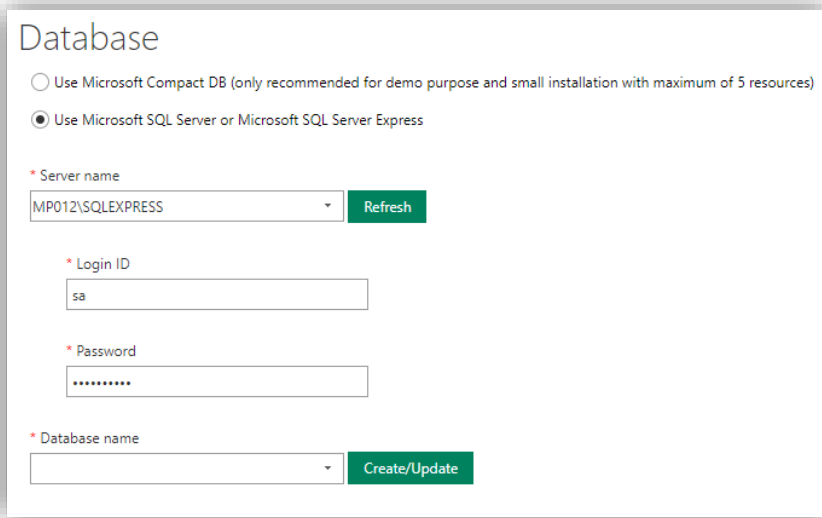
If you click **[Test]** button and the application has NOT been granted Admin consent in Azure portal, the following message shows up:



If you select **[Yes]** button, the Office 365 credentials dialog appears again for you to enter user name and password of Global Administrator account.

**NOTE:** To retrieve data for all fields in Exchange Online section, please refer to this [knowledgebase article](#) for more details.

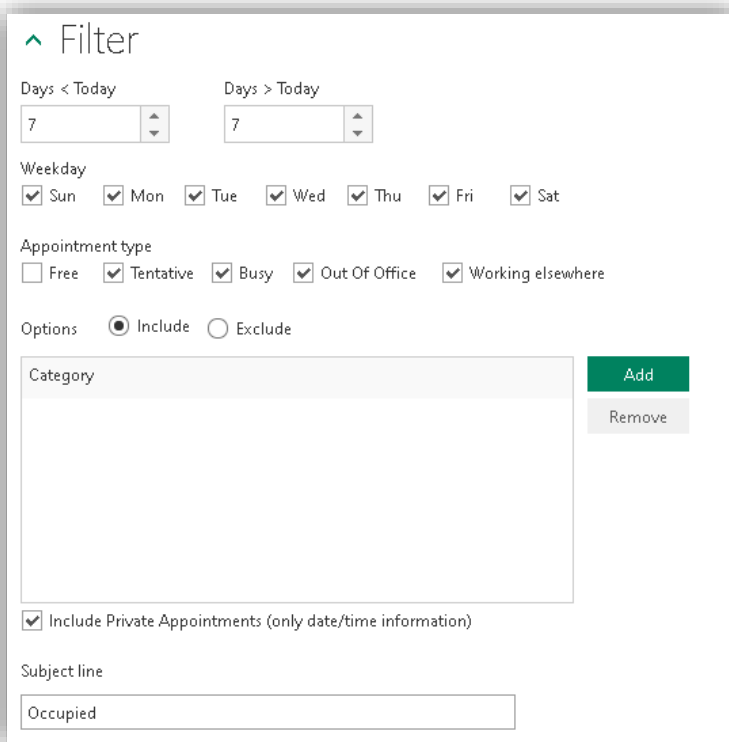
In Database section, you can select to use Compact database (by default) or SQL Server.



### 3. Configure Outputs

#### Filter

Digital Sign Service Manager includes a visual interface to set up synchronization filtering. The Filter section (shown in the figure below) contains the following elements that can be adjusted:



**Figure 4. Filter**

- **Days < Today** (days before current time) and **Days > Today** (days after current time): Adjust these two elements to define the date range. Only the items within the specified data range will be processed. Use value **0** to remove time restrictions for “before” or “after” periods. The default value

for **Days < Today** is 0 and for **Days > Today** is 0. If values for both fields are '0', Today will be employed.

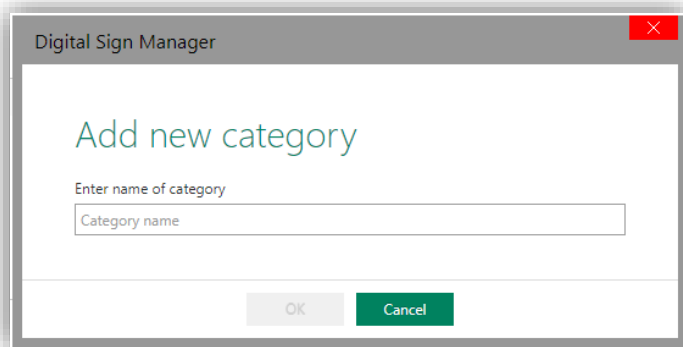
**NOTE:** Applied to **DSS Client** and **DSS WorkSpace & Report**.

- **Weekday:** Select the weekdays in which you want to get appointments. All the items in the specified weekdays will be processed. By defaults, the weekdays from Monday to Saturday will be selected.
- In the **Appointment Types** area select one or more check boxes to indicate an appointment type. Choose among:
  - **Free** – defines the appointments time as free.
  - **Tentative** – indicates that this appointment is still under consideration.
  - **Busy** – indicates that during the appointment you will be busy and do not want to be disturbed.
  - **Out of Office** – specifies that the appointment will take place out of office.
  - **Working elsewhere** – specifies that you will be somewhere else during the appointment.
- **Category Filter** represents a list of appointment categories to be included or excluded.
- **Filter Action (Options)** allows you to include categories to, or exclude categories from, processing. The selected option (**Include** or **Exclude**) applies to all the categories in the list.

You can modify the list of categories by adding new ones or removing existing ones.

To add a new category to the list, do the following:

1. Click the **Add** button. The **Add New Category** window shows up as shown in the figure below.



2. Type in the category name you need.

To remove a category, select that category in the list and click **[Remove]** button.

- **Include Private Appointments** check box allows including private appointments into processing. Select this option for DSS to collect only time and date information from appointments, leaving all text fields empty.
- The **Subject Line** field allows entering a subject value, which will be used to replace the subject line in private appointments prior to storing them to a destination store. This field is available only if the **Include Private Appointment** check box is selected.

### Exchange Connector Output

For **Exchange Connector** system, data is synchronized and saved in an xml file namely the **CustomerID.xml** file. Therefore, the CustomerID must be specified.

The xml file can be saved in two types of destination store which are FTP Server and File server. Select the checkboxes (**Output to FTP Server** and **Output to File Server**) to determine where to put XML output file.

**Figure 5. Exchange Connector Outputs**

### Output XML file to FTP Address

Select the **Output to FTP Server** checkbox to enable synchronization to FTP server. The configuration fields for this destination would be enabled.

In the **Hostname** and **Port** field, enter the name of FTP Server and the port through which data can be transfer.

**NOTE** Host name can be an IP address.

**Username** and **Password**: Specify Username and password to log on to the **FTP Server**.

**Connection Mode**: In order to connect to an FTP server that has a firewall enabled, you have to connect using a specific connection mode (**Active** or **Passive**) in your FTP program.

**Time Out**: Enter the inactivity time out value of Ftp server in this field.

**Transfer Mode**: The outputted xml file can be transferred via FTP in two different modes, namely the **Binary** mode and **ASCII** mode. The ASCII mode transfers files as 'text' while the Binary mode transfers files as raw data. Users are recommended to choose **ASCII mode** for file transferring.

**Remote Directory**: Specify the folder of the FTP Server in which the xml output file should be saved in.

**Customer ID**: The customer ID specified in this section will be used as the name of the XML output file for Exchange Connector.

You can test the correctness of the specified access parameters for the Digital Signs Output by clicking [**Test**] button. If the setting is incorrect, Digital Sign Service Manager will show you messages containing recommendations to check what value is wrong.

### Output XML file to File Server

Select the **Output to File Server** checkbox to enable synchronization to File Server. The configuration fields for this destination would be enabled.

To save XML output file to File Server, specify two fields below:

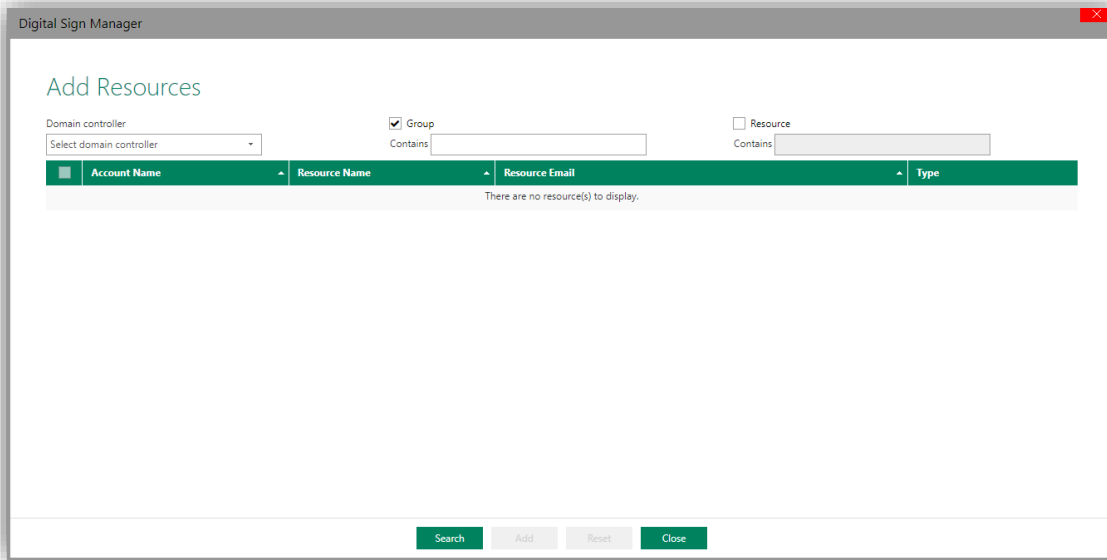
**Customer ID**: In this field, enter the customer ID for Output.

**Physical Path:** Relative path on web server where the XML file should be put.

#### 4. Add resources

In this section, you can add various types of resources. This can be done one by one, or you can select a group of resources to add as well.

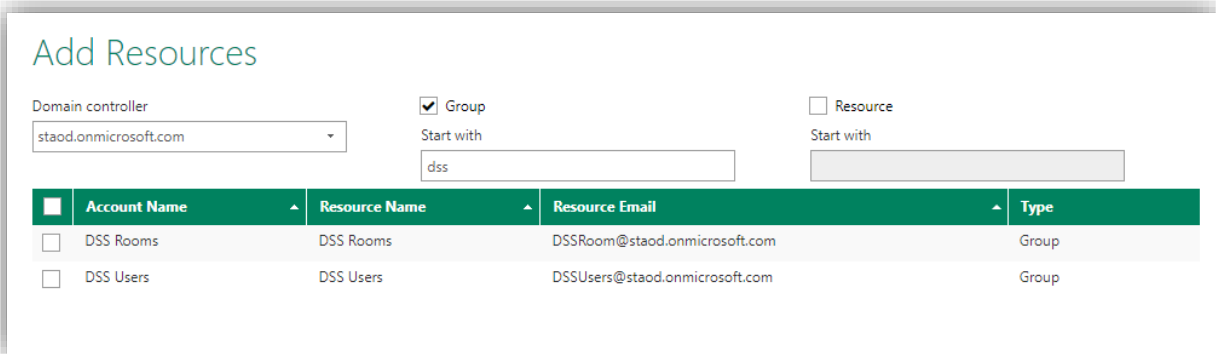
Go to **Configuration** → **Resources**, select **[Add Resources]**, the following window shows up:



**Figure 6. Add resources**

First you have to select the Domain Controller where the resources you are trying to add are contained. Then select group or resource to add by checking the relevant checkbox and type the keyword into the text field.

E.g. Select group searching and type 'dss' to the text field, then click **[Search]**, the result will contain group whose name matches the input keywords.



**Figure 7. Search group**

Check on the checkbox next to the group name and click **[Add]**, all resources in the group will be added to the system.

You can add specific resources by select resource searching checkbox and type keyword to the text field, then click **[Search]**. The result will contain resources whose name match the input keywords.

Apply the same procedure to add **Exchange Connector resources** or **Virtual resources** by clicking relevant buttons on the toolbar.

Clicking on a resource will open its properties:

The screenshot displays the configuration interface for a resource, divided into two main sections: 'General' and 'Features'.

**General Section:**

- Resource Name:** aodmeetingroom@staod.onmicrosoft.com
- Resource Email:** aodmeetingroom@staod.onmicrosoft.com
- QR Code:** A square QR code is displayed.
- Overrule default Display Name:** An unchecked checkbox.
- Sign Room Name:** aodmeetingroom@staod.onmicrosoft.com
- Resource Types:** A dropdown menu set to 'Meeting Room' with a green arrow icon to its right.
- License Type:** Two checked checkboxes: 'Digital Sign Resource' and 'Workspace Resource'.

**Features Section:**

- Language encode:** A dropdown menu set to 'UTF-8'.
- Password:** An empty text input field with a 'Show' button to its right.
- Categories:** A list containing 'Coffee' and 'Person', with 'Add' and 'Remove' buttons to the right.
- Incident Types:** An empty list with 'Add' and 'Remove' buttons to the right.
- Default Subject:** A dropdown menu set to 'Instant Meeting' with 'Add' and 'Remove' buttons to its right.
- Background:** An empty text input field with 'Add' and 'Remove' buttons to its right.
- Confirm Meeting:** Radio buttons for 'Yes' (unchecked) and 'No' (checked).
- Confirm time before/after planned start time:** A control showing '- 15 minutes +'.
- Incident Receiver's e-mail:** An empty text input field.

**Figure 8. Resource's details**

Make any necessary changes and click [**Save**] to finish.

**NOTE:** To make data refreshed, click [**Full Synchronization**] button to sync data from selected resources' calendars.

### 5. Make advanced settings for the Digital Sign Service

The **Settings** section features the following set of elements:

## Interval Settings

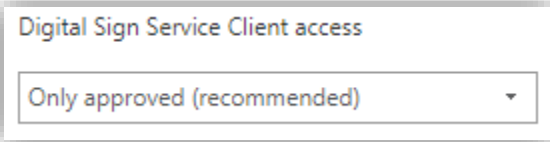
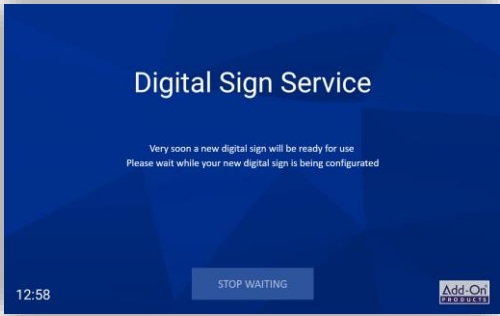
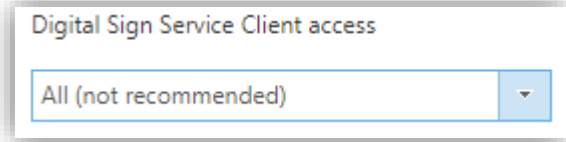
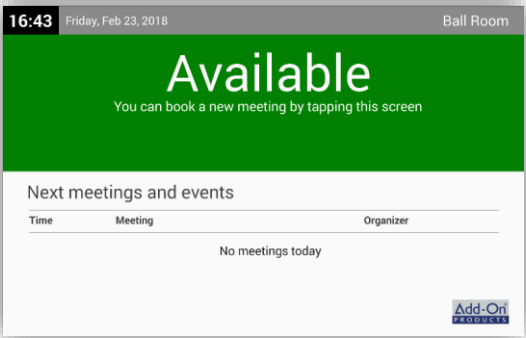
- In the **Appointments synchronization interval** box, specify the frequency (in minutes, equal or more than 1 and not exceeding 1000), at which the data will be synchronized from the Exchange Server.
- Check on **Enable period AD synchronization** and specify the time at which the synchronization will be implemented.
- If you check “**Disable in period**” and input the time range, the system will be disabled in the time range that you selected.

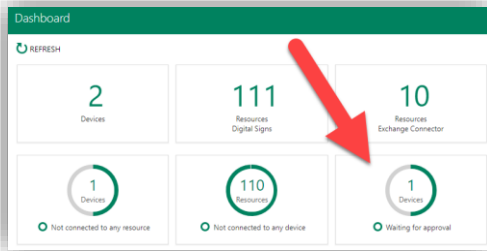
## Advanced

- **Use https:** Check this option to select https protocol
- **Use keyboard for user-authentication on digital signage:** Check this option to enable use of keyboard for entering credentials.
- **Use push notification for Exchange Online:** Check this option to enable use of notification for Exchange Online.

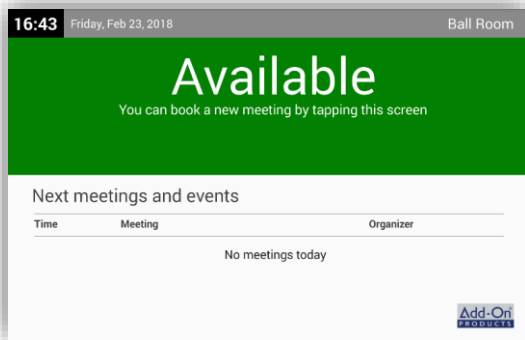


- **Use push notification for Exchange On-Premise:** Check this option to enable use of notification for Exchange On-Premise.
- **Allow users to link NFC Card to the system:** Check this option to enable linking NFC card to Digital Sign Service.
- **Use Workspace app:** Select this to use Workspace app for use of NFC card.
- **Enable service for external applications:** Select this to allow creating, updating and deleting NFC card.
- **Use Office 365 Single Sign on:** Select this to log in with Office 365 Single Sign-On
- **Binding:** Path to Digital Sign Service website, which will be used to create URL in the schedule file
- **Digital Sign Service Client access:** Configure if devices need to be approved to access the server. It decides which scenario will be selected for the installation flow involving 2 objects: Server side (interacted via DSS Manager) and Client side (interacted via DSS Client application):

Flow 1	Flow 2
<p>1. DSS for Server is installed and configured to allow from 'Only approved' clients</p>  <p>2. DSS Client app starts up for the first time, user clicks [SETUP] button</p> <p>3. User provides URL to DSS for Server and a device name</p> <p>4. Click [Save], the details are verified and the following screen shows up:</p>  <p>5. At this moment, DSS Client app has to wait for the approval from server side</p> <p>6. On DSS Manager, a list of devices is waiting for approval:</p>	<p>1. DSS for Server is installed and configured to allow access from 'All' clients</p>  <p>2. DSS Client app starts up for the first time, user clicks [SETUP] button</p> <p>3. User provides URL to DSS for Server and a device name</p> <p>a. If user selects Configuration managed by <b>Client</b> and click [Save], the DSS client app on the device turns to the initial screen view:</p>  <p>b. If user selects Configuration managed by <b>Server</b> and click [Save], the flow goes on as described from <b>Step 4</b> in <b>Flow 1</b>.</p>

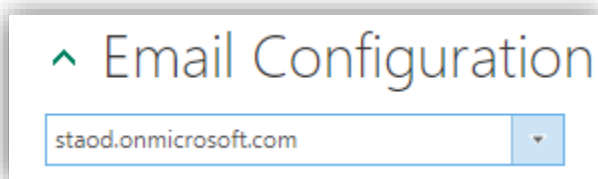


7. The administrator will confirm the device and do all necessary configuration for client side (door sign type, resource name, template and all others).
8. After administrator approves the device, the DSS client app on the device turns to the initial screen view:



- **Login Method:** Select a method for logging into the system.
- The **Time Zone of Exchange Connector** allows setting up the resource time zone so that the correct time data is displayed in events in output file. Time zone selected in this field will be written in the **output** file.

### Email Configuration



In this section, you need to select a method to send email to the DSS system. Selecting a method from the drop-down list will enable **Reservation Confirmation** and **Error Notification** sections underneath.

### ^ Email Configuration

staod.onmicrosoft.com

\* Application (Client) ID  
fd53fec7-1095-4a48-92ad-9855415cd3a9

\* Client Secrets  
.....

\* Sender's e-mail  
staod@staod.onmicrosoft.com **Test Send Mail**

### ^ Reservation Confirmation

Send confirm meeting email

Send confirmation at

06:00 or 15 minute(s) before started

### ^ Error Notification

Send email if errors occur

- Windows Service is not running
- No heartbeat from any devices
- Synchronization has errors

Receiver's e-mail  
user1@staod.onmicrosoft.com

## Logging

### ^ Logging

Logging Level  
Error Only

Logging level helps define what sort of data is to be logged. The **Logging level** drop-down list has 2 options: **Error Only** and **Verbose**.

Select **Error Only**, if you want only error information to be logged. In normal case, the **Error Only** option should be selected.

Select **Verbose** if hard-to-locate problems are to be detected. This option logs more detailed information about the process: errors and all sorts of calendar synchronization events which means the log files will

require more hard disk capacity. DSS produces a log file every day. User has to manually delete the old and unnecessary log files for releasing disk space (or files older than 2 days will be automatically removed).

## Tag

- It is possible to create a note field in the xml file by selecting the **Using Notes tag** check box. Digital Sign Service will get data in the appointment's body as many characters as specified in the field below.
- In the XML file there always is a Company Name field. When you check the **Company tag** check box and specify a value in the field underneath, Digital Sign Service will examine appointment's subject and body to see if there is text matching the specified value. If there is a match, DSS will retrieve all data from the matched text to the end of that line and put it into the Company Name field in the XML file.

If DSS finds out more than one result match the specified value, the first value will be used.

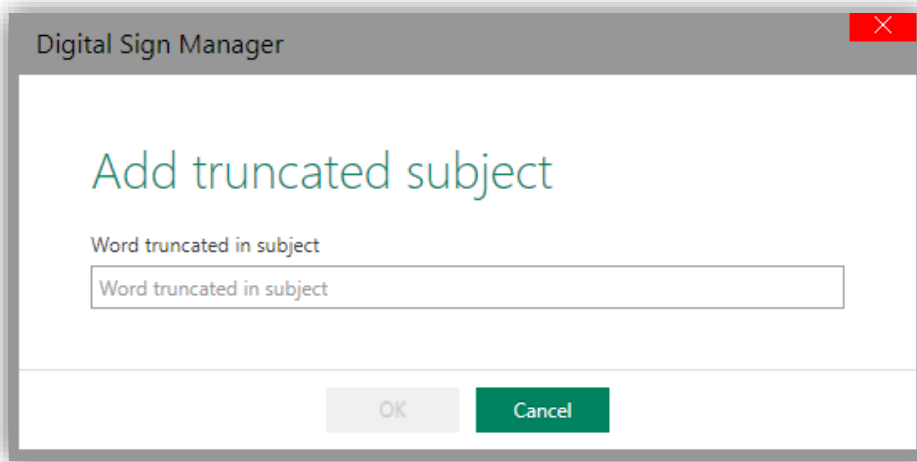
## Truncated Text

This feature of Digital Sign Service allow user to remove some text from the subject of an appointment, before saving it to the XML file.

In this section, there is a list of words that will be removed from the subjects.

**Figure 9. Settings section – Truncated text**

Click **Add** button to insert more text into the list or select a text and click **Remove** to delete.

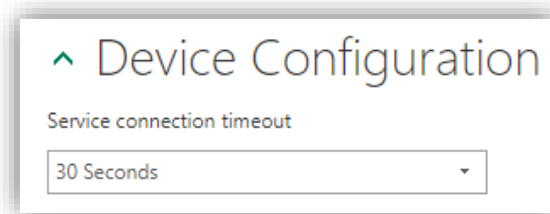


**Figure 10. Settings section – Truncate Subject**

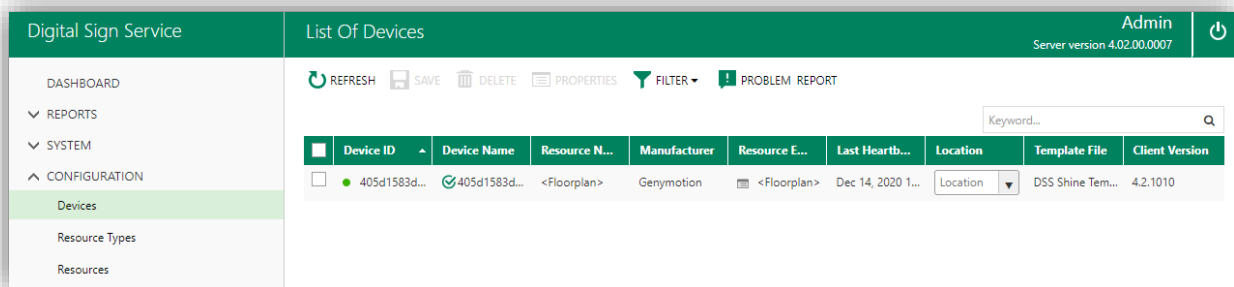
The truncated text is not case sensitive and DSS will search for whole word throughout the subject.

### Device Configuration

In this section you can configure connection timeout of the service:



## 6. Configure devices to be used with DSS Client



**Figure 11. List of devices**

The **Devices** node opens an interface section where all devices are displayed. From this panel you can see which devices are connected to resources and which are not by looking at the Resource Name and Resource Email columns. Additionally, you can see which devices are online/offline by looking at the dot icon color next to the MAC address (Device ID):

- Green color = device connected to resources
- Grey color = devices not connected to resources

**NOTE:** All devices asking for permission to connect to the server will be listed in **'Waiting for approval'** node.

Click **[Problem Report]** button to open **Incidents** window in which you can view details of the reported issues.

You can view a device's details by clicking on it or checking on it and clicking **[Properties]** button on the toolbar, its details will be like this:

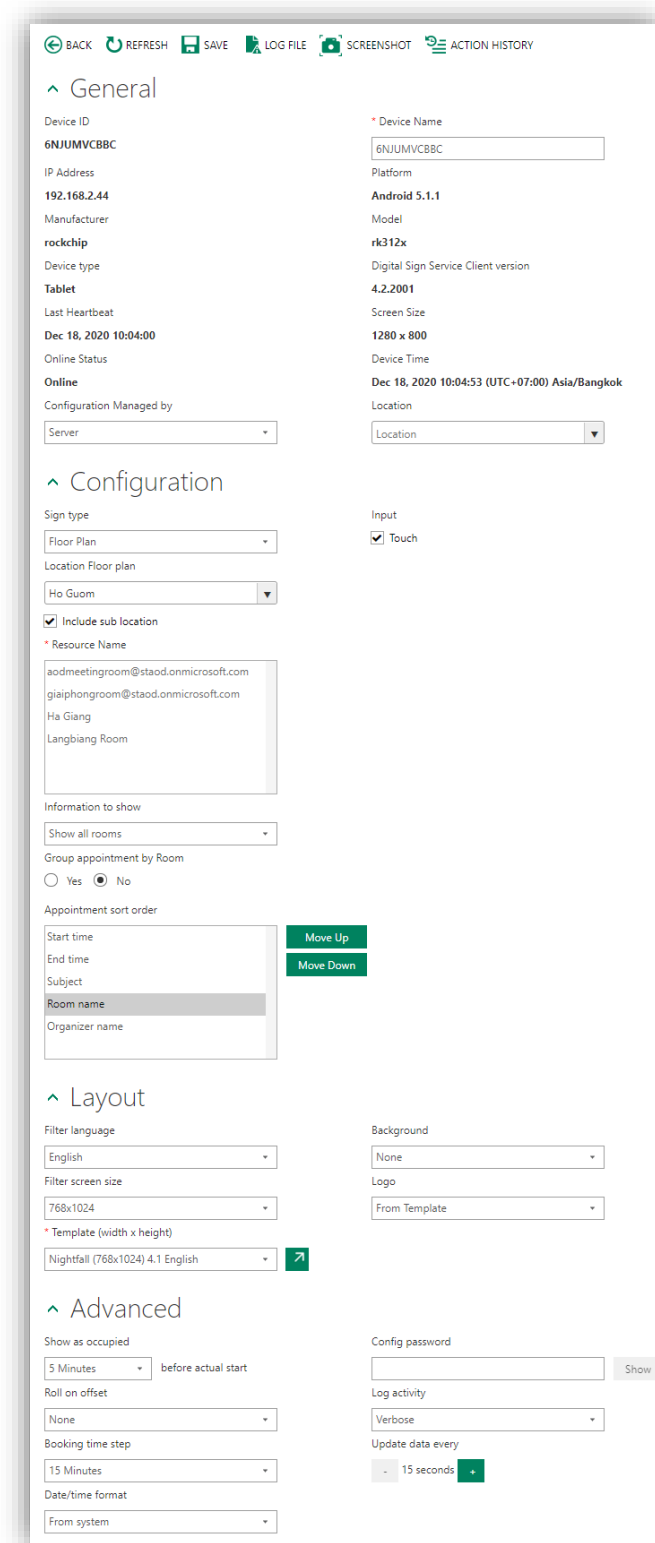


Figure 12. Details of a device

<b>General</b>	
This section displays information of the device and allows you to type Location name to filter.	
<b>Configuration managed by</b>	<p><b>NOTE:</b> This field is only available after the server connection is established.</p> <p><b>Client:</b> The configuration is controlled on Client side</p> <p><b>Server:</b> The configuration is controlled on Server side</p>
<b>Location</b>	Select location of the device
<b>Configuration</b>	
<b>Sign Type</b> (configure if the sign is a door sign or a meeting directory sign)	<p><b>Door Sign:</b> Sign used for a specific room.</p> <ul style="list-style-type: none"> <li>- Door Sign: User can interact on the screen</li> <li>- Door Sign (One Touch): User can book/end the instant meeting by one touch on the screen</li> </ul>
	<b>Meeting Directory Sign:</b> Sign configured to show information for a number of DSS resources.
	<b>Floor Plan:</b> Sign configured to show floor plan of a resource.
<b>Location Floor plan</b>	Select the floor plan that contains location of the device.
<b>Resource name</b>	Select a resource from the list (for Door Sign) or select several specific resources to be displayed (for Meeting Directory Sign).
<b>Enable Power Options</b>	<p><b>NOTE:</b> This option is only applicable for <b>Door Sign (Interactive)</b> and <b>Door Sign (One Touch)</b>.</p> <p>Enable this node to set up time to turn on and off the device. After that you can configure the time to power up and power down.</p>
<b>Confirm Meeting</b>	<p><b>NOTE:</b> This option is only applicable for <b>Door Sign (Interactive)</b> and <b>Door Sign (One Touch)</b>.</p> <p>Enable this node to ask for meeting confirmation and adjust confirmation time.</p>
<b>Information to show</b>	<p><b>NOTE:</b> This option is only applicable for <b>Meeting Directory Sign</b>.</p> <p>Along with Resource name, this option allows you to filter resources for the content displayed on the meeting directory screen</p>
<b>Group appointment by Room</b>	<p><b>NOTE:</b> This option is only applicable for <b>Meeting Directory Sign</b>.</p> <p>Enable this option if you want the appointments to be grouped by resources.</p>
<b>Appointment sort order</b>	<p><b>NOTE:</b> This option is only applicable for <b>Meeting Directory Sign</b>.</p> <p>Use 2 buttons [Move Up] and [Move Down] to decide order of the appointment based on their details (Room name, Start time, Subject, etc.). You can also adjust the slide time by increasing/decreasing it.</p>
<b>Input</b>	
<b>NOTE:</b> This section is only available when you select Door Sign (interactive) or Door Sign (One Touch) for Sign type.	
<b>Auto upgrade</b>	<b>NOTE:</b> This option is only applied to Qbic device.
<b>Touch</b>	Enabling this option allows touching the screen to book/confirm/end/extend meeting

<b>Keyboard</b>	If this option is turned on, when you book/confirm/end/extend meeting there will be an authentication screen displayed, asking for user name and password to proceed.
<b>Card reader</b>	<p><b>NOTE:</b> This option is only enabled on Qbic and Glory Star devices.</p> <p>If this option is turned on, when you book/confirm/end/extend meeting there will be an authentication screen displayed, and you have to swipe your card at the <b>[Home]</b> button to proceed.</p> <p>Refer to “Card Information” section in <i>DSS Client User Guide</i> for more details on how to register the card.</p>
<p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>- If the above options are all enabled, the 'Card reader' will be prioritized.</li> <li>- If 'Card reader' option is disabled, and 2 other options are enabled → the 'Keyboard' is prioritized.</li> <li>- If the above options are all disabled, you cannot book/confirm/end/extend meeting.</li> </ul>	
<b>Layout</b>	
<b>Filter Language</b>	Select preferred language to be used in the screen interface
<b>Filter Screen Size</b>	Select preferred screen size to be used in the screen interface
<b>Template (Width x Height)</b>	You can select suitable screen resolution and language template for the sign.
<b>Background</b>	<p><b>NOTE:</b> This selection overrides design in the template file you select in 'Template (Width x Height)'</p> <p>Select a background image to be displayed on the DSS Client interface</p> <ul style="list-style-type: none"> <li>- <b>None:</b> No background image</li> <li>- <b>Photo Library:</b> This option enables the [Browse] button and allows you to select background image from the client device.</li> <li>- <b>From Server:</b> The background image is established by Administrator in Digital Sign Service Manager.</li> <li>- <b>From Template:</b> The background image is established in the template file you select in 'Template (Width x Height)'. For more information on how to set up the background on template file, please refer to object <b>BackgroundImage</b>/property <b>Source</b> of the corresponding sign type in <i>DSS Client – Design Guide</i>.</li> </ul>
<b>Logo</b>	<p><b>NOTE:</b> This selection overrides design in the template file you select in 'Template (Width x Height)'</p> <p>Select logo to be displayed on the DSS Client interface:</p> <ul style="list-style-type: none"> <li>- <b>None:</b> No background image</li> <li>- <b>Photo Library:</b> This option enables the [Browse] button and allows you to select background image from the client device.</li> <li>- <b>From Template:</b> The background image is established in the template file you select in 'Template (Width x Height)'. For more information on how to set up the logo on template file, please refer to object <b>LogoImage</b>/property <b>Source</b> of the corresponding sign type in <i>DSS Client – Design Guide</i>.</li> </ul>
<b>Advanced</b>	
<b>Show as occupied</b>	Select time interval before start time of an appointment from which the room will be considered “occupied”.
<b>Roll on offset</b>	<p>Select time interval to establish display of the next meetings on the sign. This roll-on offset interval takes current time as a benchmark.</p> <p>If the duration from current time to start time of next meeting is less than roll on offset value, the next meeting will be displayed, and vice versa.</p>



	<b>NOTE:</b> Value in “Roll on offset” field should always be greater than value in “Treat meeting rooms as...” field.
<b>Booking time step</b>	Default time interval for booking an appointment (e.g. If the value here is 15, the default appointment time will be 15:00, 15:15, 15:30, etc.)
<b>Date / Time format</b>	Select where format for date / time will be employed.
<b>Config Password</b>	Password to open client Setting screen
<b>Log activity</b>	Select the level (None, Error or Verbose) that you want the application to apply for event logging.
<b>Update data every</b>	Select time (seconds) for the data update cycle.
<b>Kiosk Mode</b>	If you turn on this mode, 3 on-screen buttons (Recent Apps, Home and Back) on the devices are disabled. <b>NOTE:</b> Kiosk Mode is only available on Qbic device (Android), other devices running Android, iOS or Windows do not have this mode.
<b>Automatic app upgrade</b>	Decide if the app will be automatically upgraded. <b>NOTE:</b> Automatic app upgrade is only available on Qbic device (Android), other devices running Android, iOS or Windows do not have this mode.

Toolbar Buttons	Description
<b>LOG FILE</b>	View log file of the device
<b>SCREENSHOT</b>	View screenshot of the device at the moment
<b>ACTION HISTORY</b>	View a list of actions performed on the device.

### Create sub-location

If you want to create sub-group of locations under a specific node, click on that node and select **Plus** icon as shown in the following figure:

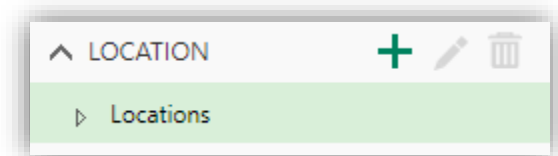


Figure 13. Add a new location

Then you can type the name of the new location and click **[OK]**, and the new sub-group shows up under **Locations** node:

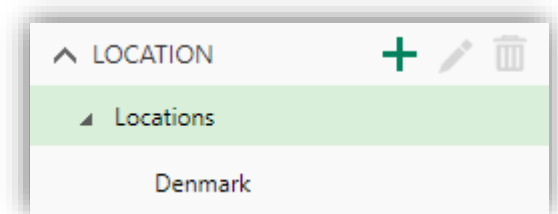
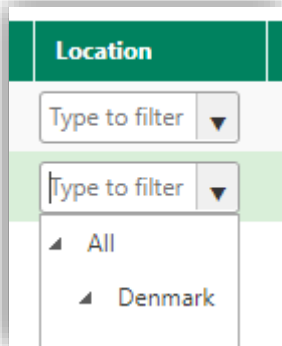


Figure 14. New location group

### Add devices to a location

Now you can add devices to this new location group by selecting the new group name from the 'Location' column of a device:



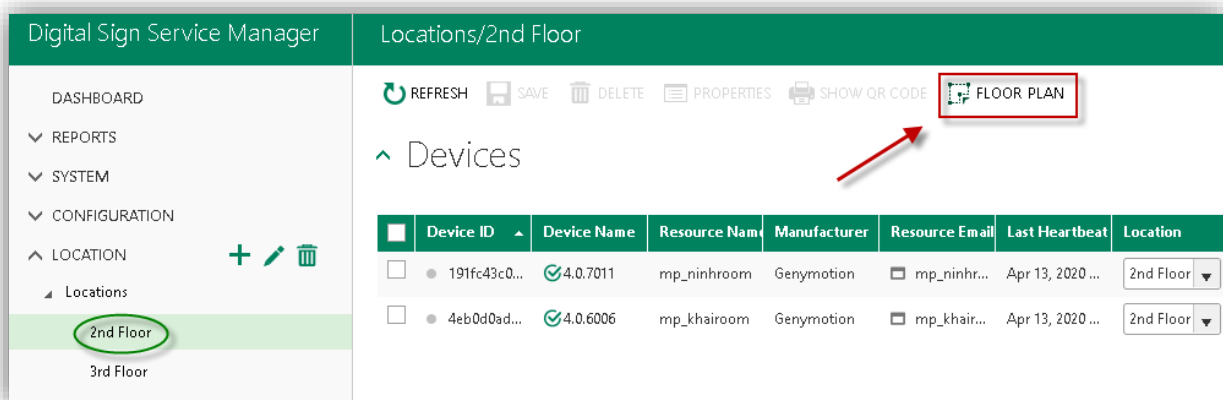
**Figure 15. Add device to new group**

Click on the arrow button to select a group from the drop-down list.

Click [**Save**] to finish.

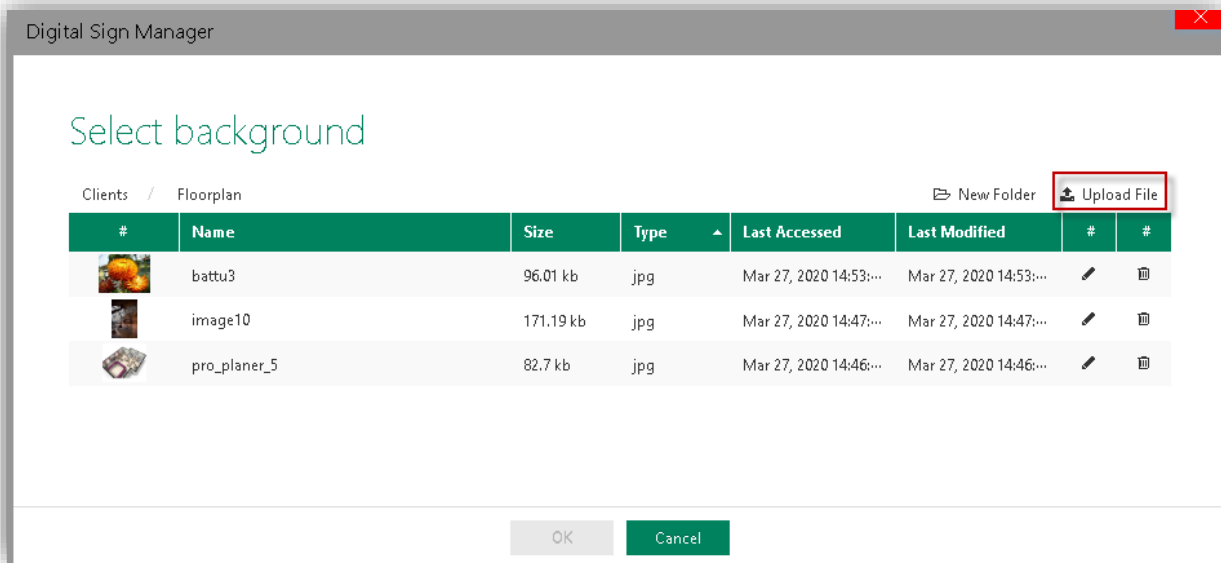
### Configure floorplan for a location

When booking a resource, it is useful if you can navigate to the resource and see the floor plan / ground map on the screen. The Floor plan section is created to serve that purpose.



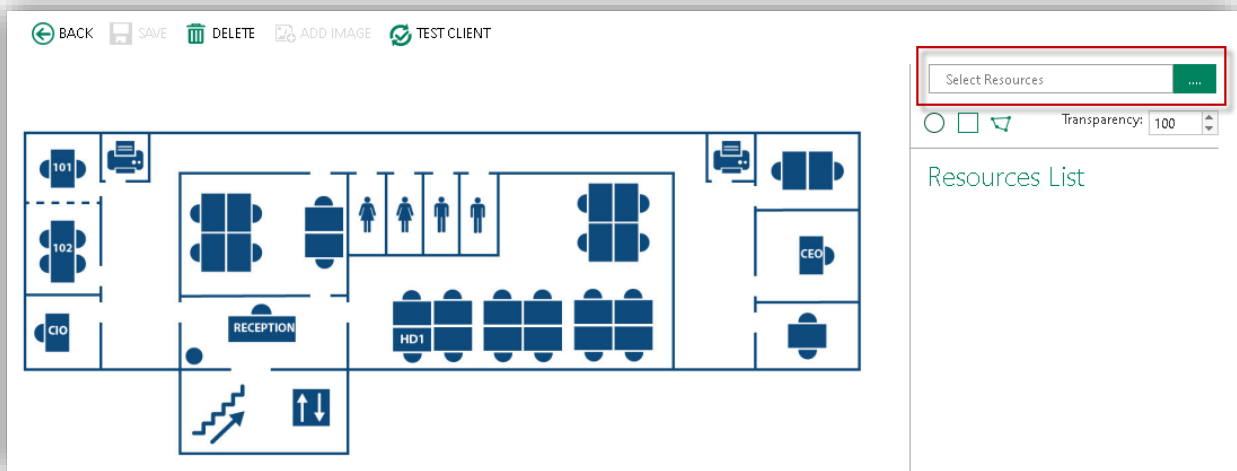
**Figure 16. Configure floorplan**

Select a location and you can see the button [**Floorplan Configuration**]. Click on it and the **Floor Plan Editor** shows up. In this panel, first of all you need to add a floor plan (a map of the selected location) by clicking [**Add Image**] button. The following window is displayed:



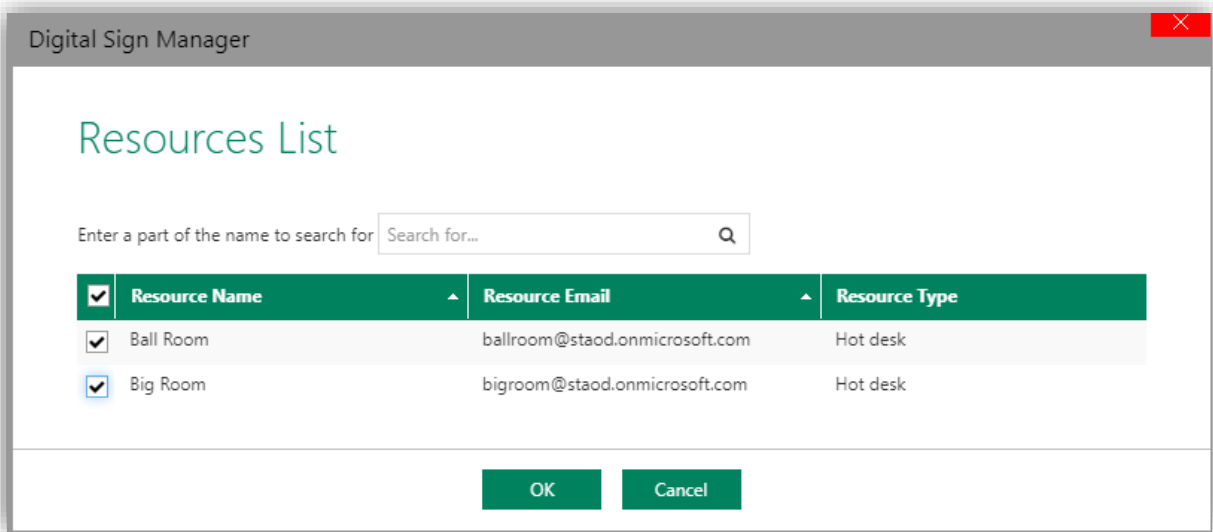
**Figure 17. Select Floor Plan**

In this window, you can select the available floorplan or upload a new one from your computer by clicking [**Upload File**] button. When the floor plan is loaded to the screen, you can now map a resource with a specific location in the floor plan, so that organizer knows better about a resource's location:



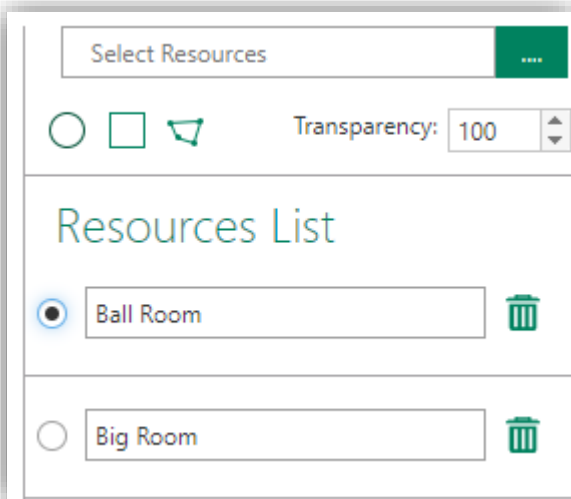
**Figure 18. Add Floor Plan**

Click [**Select Resources**] to add a resource to the list. You can search for it from the pop-up window:

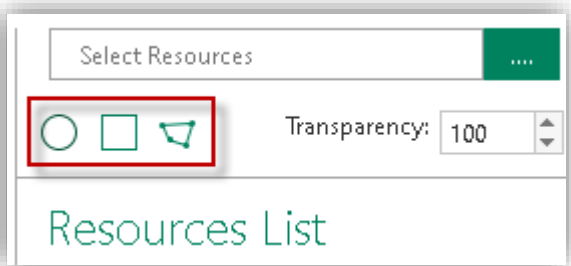


**Figure 19. Select resources**

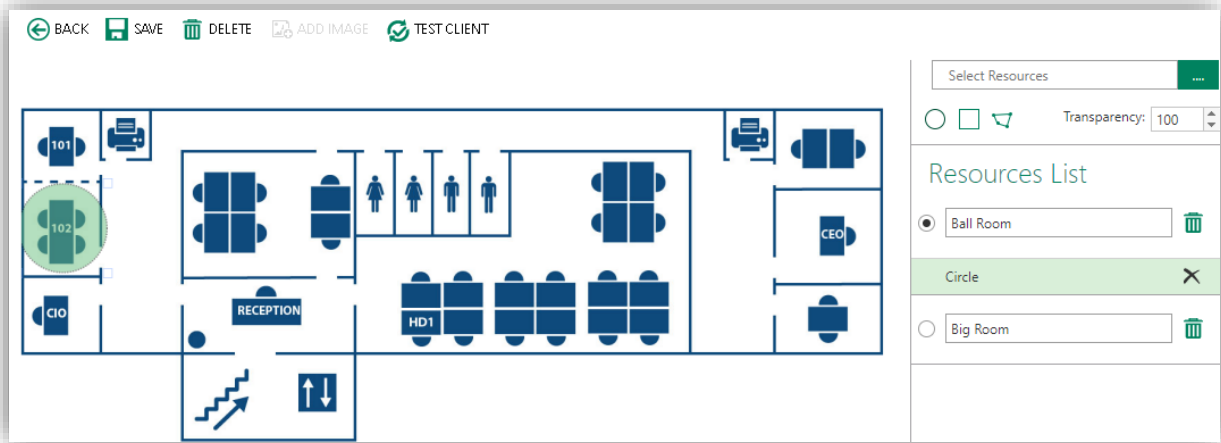
After adding all necessary resources, you need to select a resource from the list on the right panel...



...then select a shape...

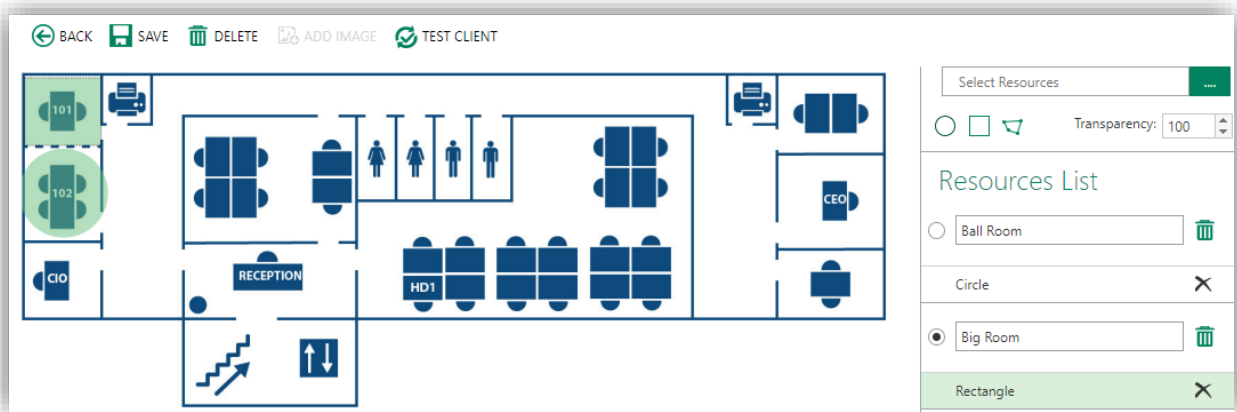


... and put it on the floor plan:



You can see in the above example, the shape [Circle] is selected for the resource 'Ball Room', and a circle is put into the floor plan.

You can do the same for the other resource. You might select a similar shape (Circle) or different shape (Rectangle or Polygon), and this is the result:



**Figure 20. Floor Plan with resources**

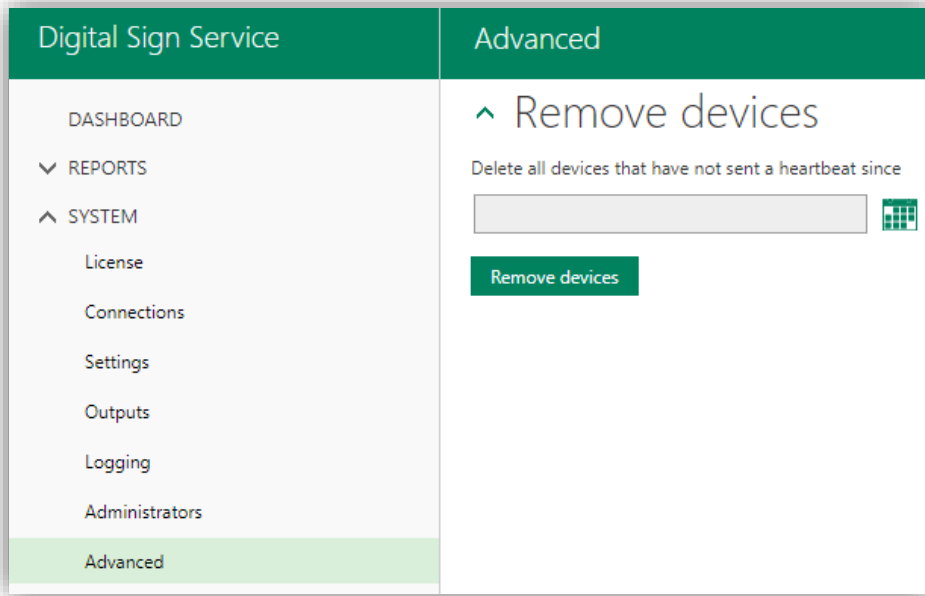
Then click [**Save**] to finish. You can see the result in **DSS WorkSpace**.

**NOTE:** Click on [**Test Client**] to know how this feature works on client side.

## Other configurations in DSS Manager

### Advanced

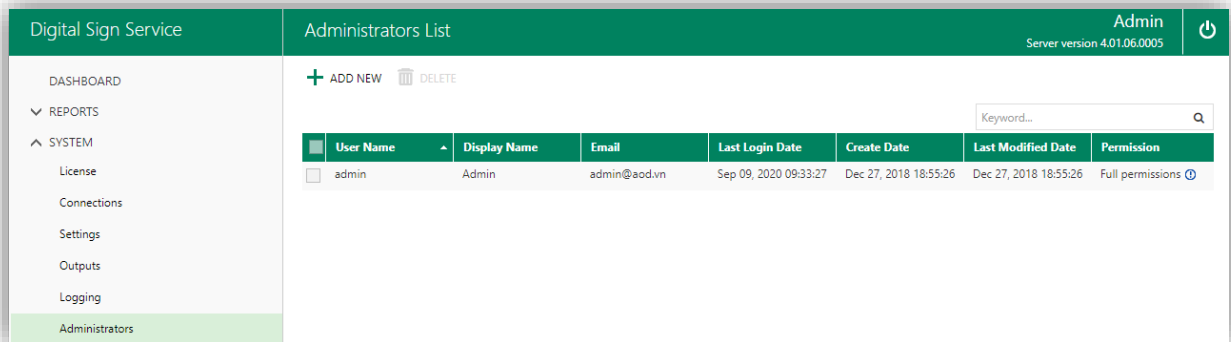
From here, you can remove devices that have not been operative from the time mark that you configure:



**Figure 21. Remove devices**

### Administrators

In this section, you can configure administrator of the system.



**Figure 22. Administrator list**

Click **[Add New]** and the following panel shows up for you to add a new administrator:

**Figure 23. Add a new administrator**

Fill in necessary information and click **[Save]** to finish.

### Categories

This section displays all categories that can be assigned to resources:

Icon	Name	Used	Created Date
<input type="checkbox"/>	Large Rooms	✓	Dec 14, 2020 10:37:47
<input type="checkbox"/>	Small rooms	✓	Dec 14, 2020 10:37:59

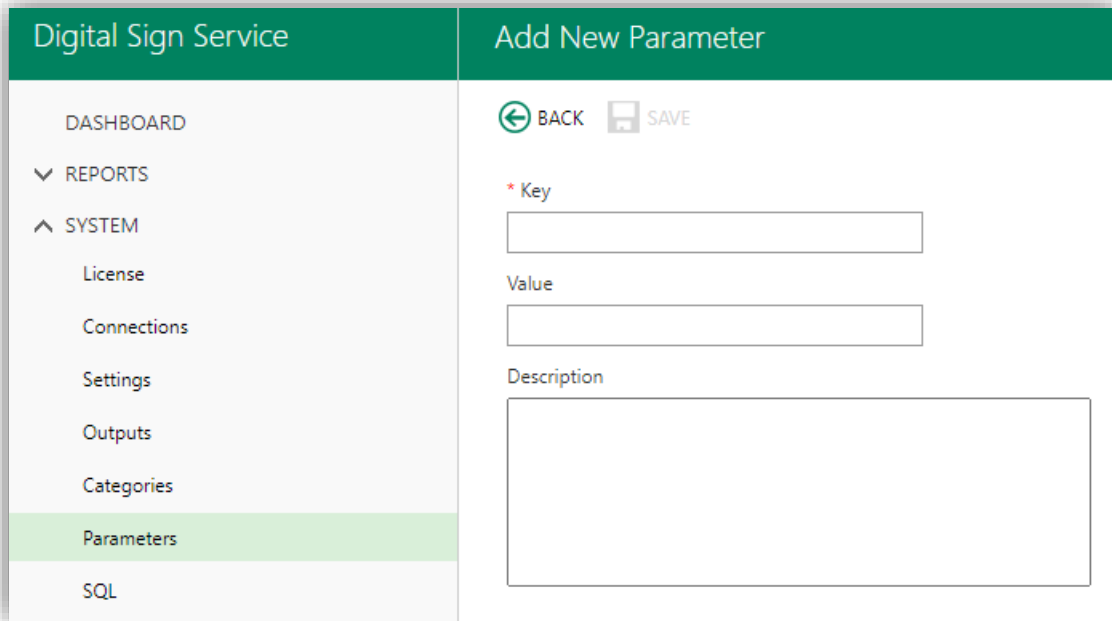
**Figure 24. Categories list**

You can add more categories to this list by clicking **[Add New]** button on the toolbar. These categories can be later assigned to resources in Features section of a resource’s details.

### Parameters

**Parameters** are used for system configuration. Every parameter has its own functionality.

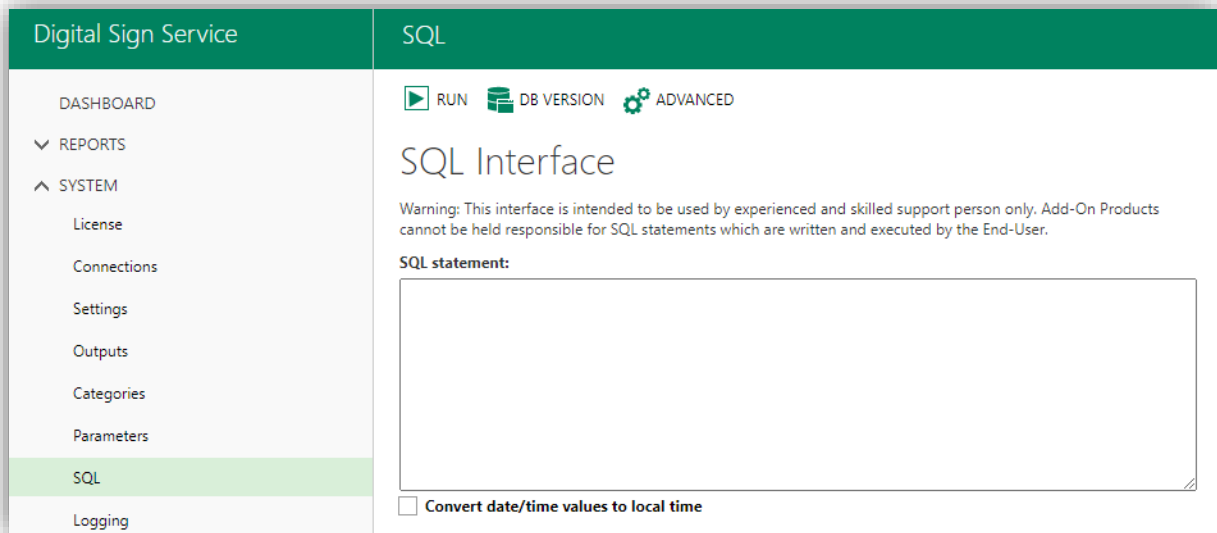
In this section, you can create parameters to be used in the system by clicking **[Add New]** button.



**Figure 25. Add a new parameter**

### SQL

This interface is provided for advanced level data management. Through this view, you can execute SQL statements directly on Database and view the result under the form of a table.



**Figure 26. SQL Design**

Clicking [DB version] button shows the DB version in use:



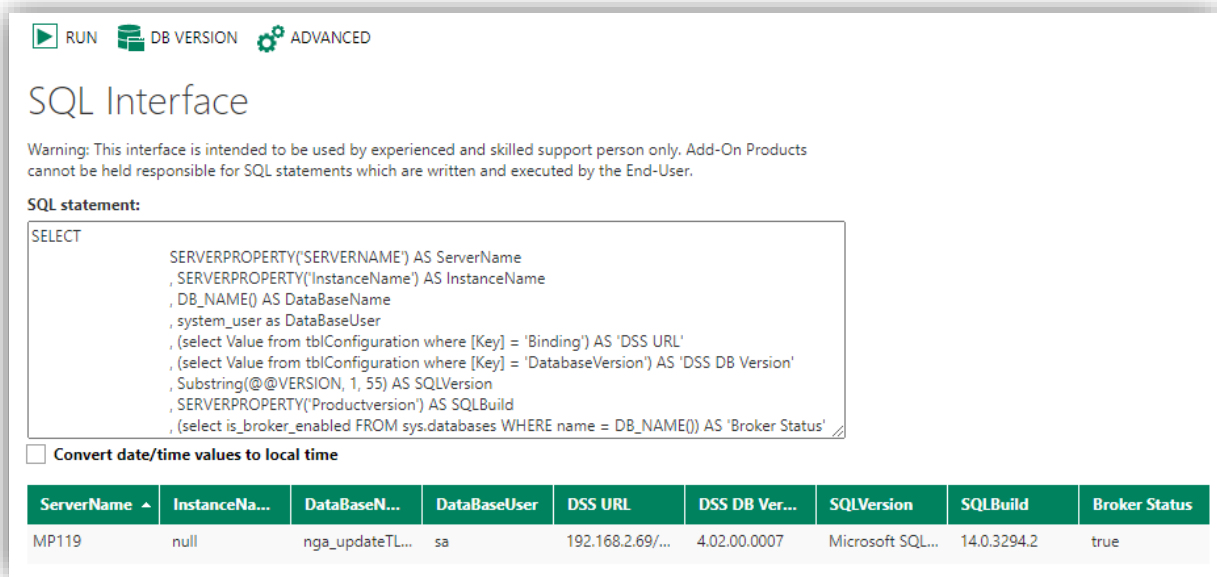


Figure 27. Show Database version

The following screen is the advanced mode of **SQL** which is accessed by clicking [Advance] button. Through this interface you can download the result of **SQL** queries on your own machine. You can also execute the update query.

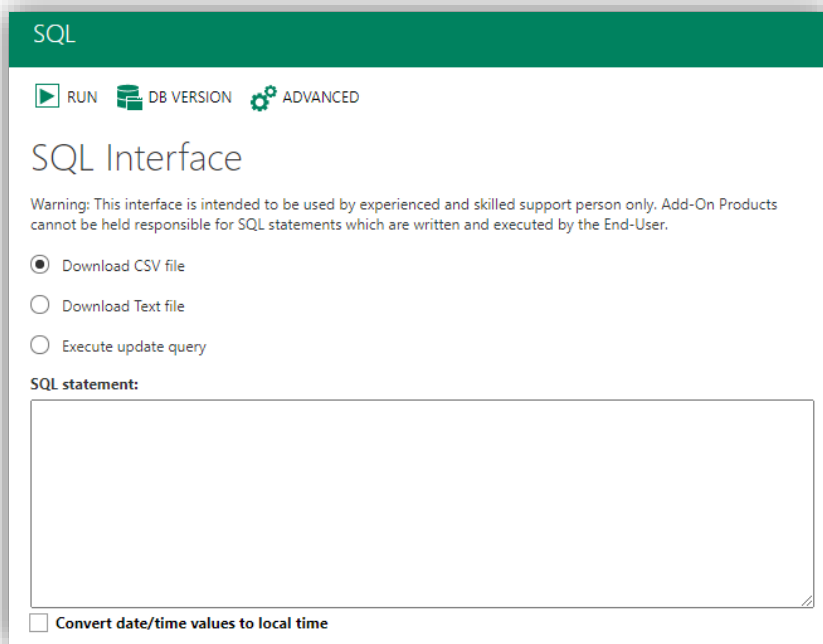


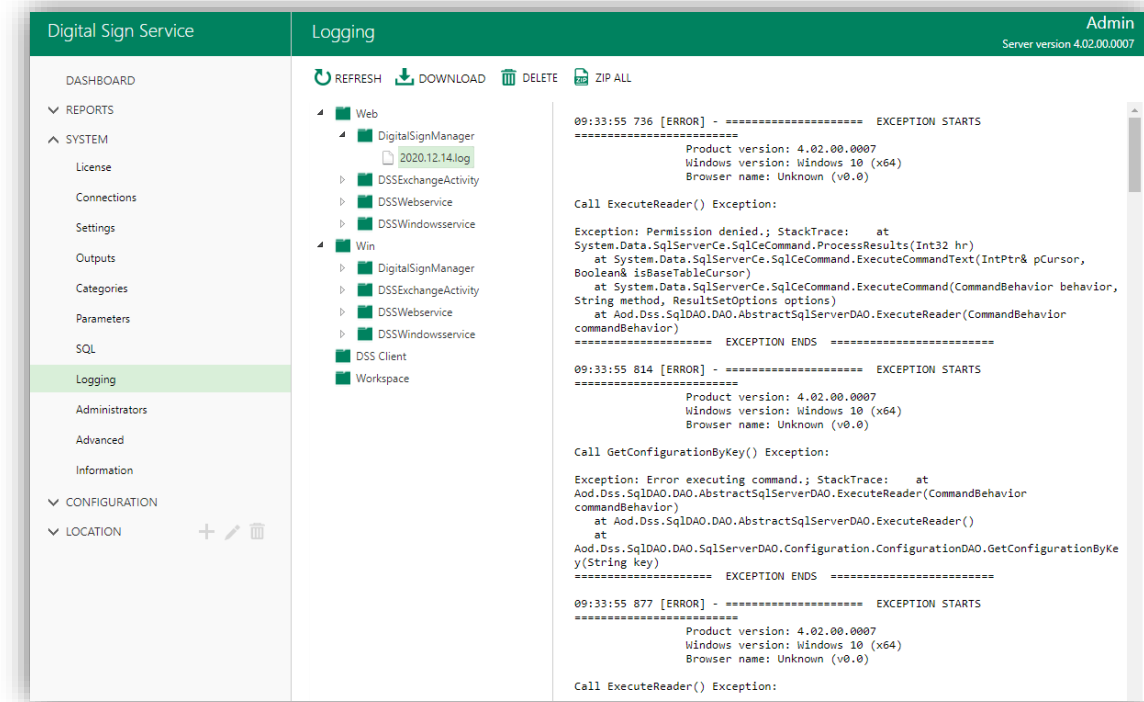
Figure 28. Advanced mode of SQL

**NOTE:** It is strongly recommended that this interface must be used by experienced support personnel, who should be proficient in writing/using SQL statements and well aware of the Resource Central Database design. Incorrect use of this interface may halt the Resource Central System or may permanently destroy the data.

Toolbar button	Description
Run	Click on Run to execute the query.
DB version	Show DB version in use
Advance	Advanced mode of SQL

## Logging

This section displays detailed logs that you can see in the system.



**Figure 29. System – Logging**

Clicking each log file, its content will be displayed on the right panel of the screen.

## Information

This section provides you with all information related to the system and application.

The screenshot shows the 'Information' page in the Digital Sign Service interface. It is divided into two main sections: 'Platform information' and 'Database information'. The 'Platform information' section lists the Digital Sign Service version (4.02.00.0007), OS version (Microsoft Windows NT 10.0.17763.0), and Database engine version (Microsoft SQL Server 14.0.3294.2). The 'Database information' section lists the Database name (nga\_updateTL\_14Dec) and Database structure version (4.02.00.0007). Below this, there is a table showing filter appointments from Nov 14, 2020 to Jan 13, 2021, and a table listing various database tables and their row counts.

Table name	Row count
tblActionHistory	161
tblActionLog	0
tblAdmin	1
tblAppointments	1142
tblAriadneResources	0
tblCategory	2
tblChildResources	0
tblConfiguration	188

Figure 30. System information

## Resource Types

This section displays all resource groups used in the system.

The screenshot shows the 'Resource Types List' page in the Digital Sign Service interface. The page has a toolbar with '+ ADD NEW', 'DELETE', and 'REFRESH' buttons. Below the toolbar is a search bar with the placeholder text 'Keyword...'. The main content is a table with the following columns: 'Icon', 'Name', 'Used', 'Use this Resource T...', and 'Create Date'. The table contains two rows of data: 'Hot desk' and 'Meeting Room'.

Icon	Name	Used	Use this Resource T...	Create Date
	Hot desk		<input checked="" type="radio"/>	Jan 03, 2020 18:05:40
	Meeting Room	✓	<input type="radio"/>	Jan 03, 2020 18:05:40

Figure 31. Resource Types

You can add more types to this list by clicking [**Add New**] button on the toolbar. These types of resources can be assigned to each resource in Resource list:

Account Name	Resource Name	Resource Email	Location	Resource Types
aodmeetingroom@...	AOD Meeting Room	aodmeetingroom@...	Ly Thuong Kiet	Meeting Room
ballroom@staod.on...	Ball Room	ballroom@staod.on...	Location	Meeting Room
bigroom@staod.on...	Big Room	bigroom@staod.on...	Location	Meeting Room
boardroom@staod....	Board Room	boardroom@staod....	Location	Meeting Room

**Figure 32. List of Resources**

A resource type consists of the following details:

**Add New Resource Type**

BACK SAVE

\* Name

\* Icon  Add Remove

Created Date  
Dec 14, 2020 16:49:59

Show the function to "Add reservation to own Calendar"  Use this Resource Types as the default one

Allow Recurring

\* Allow set reservation for the next number days

\* Number of reservation

Time rule in creating reservation  
Half hour (editable)

Use this "Show as" default value  
Free

Display subject input box when creating new reservation  
 Use this default subject

<Resource> reserveret af <Organizer> Language

**Figure 33. Resource Type details**

Fill in name and select icon for the resource type.

Check on **Show the function to "Add reservation to own Calendar"** to enable this function on Workspace.

Select a value for **Allow booking reservation for the next number days** with the following options:

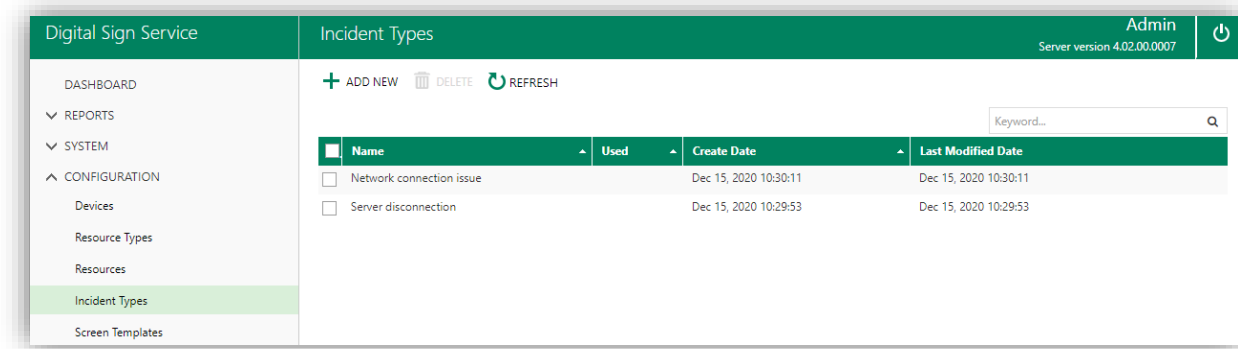
Value	Description
-1	No limit. You can book reservations up to the next 1000 days.
0	You can only book reservations today.
Positive integer	You can book reservations in the next (entered number of) days.

These values can be applied to **Number of reservations** field.

You can select “Half hour” or “Workday” in **Time rule in creating reservation** to define default duration for a reservation.

### Incident types

This section displays all types of incidents created in the system.



**Figure 34. Incident types**

Click [**Add New**] button to create a new incident type, in which you can enter its name and click [**Save**] to finish.

### Screen templates

This section displays all templates used in the system.

File Name	Template Name	Used	Version	Width	Height	Language	Last Modified Date
<input type="checkbox"/> Colorful (1024x768) Danish.xml	Colorful		4.0	1024	768	Danish	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1024x768) English.xml	Colorful		4.0	1024	768	English	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1024x768) French.xml	Colorful		4.0	1024	768	French	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1024x768) German.xml	Colorful		4.0	1024	768	German	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1024x768) Mandarin Chinese.xml	Colorful		4.0	1024	768	Mandarin Chinese	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1280x800) Danish.xml	Colorful		4.0	1280	800	Danish	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1280x800) English.xml	Colorful		4.0	1280	800	English	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1280x800) French.xml	Colorful		4.0	1280	800	French	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1280x800) German.xml	Colorful		4.0	1280	800	German	May 28, 2019 09:10:52
<input type="checkbox"/> Colorful (1280x800) Mandarin Chinese.xml	Colorful		4.0	1280	800	Mandarin Chinese	May 28, 2019 09:10:52
<input type="checkbox"/> Hotdesk (480x320) Danish.xml	Hotdesk		4.0	480	320	Danish	May 28, 2019 09:10:52
<input type="checkbox"/> Hotdesk (480x320) English.xml	Hotdesk		4.0	480	320	English	May 28, 2019 09:10:52
<input type="checkbox"/> Hotdesk (480x320) French.xml	Hotdesk		4.0	480	320	French	May 28, 2019 09:10:52
<input type="checkbox"/> Hotdesk (480x320) German.xml	Hotdesk		4.0	480	320	German	May 28, 2019 09:10:52
<input type="checkbox"/> Hotdesk (480x320) Mandarin Chinese.xml	Hotdesk		4.0	480	320	Mandarin Chinese	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (768x1024) Danish.xml	Nightfall		4.0	768	1024	Danish	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (768x1024) English.xml	Nightfall		4.0	768	1024	English	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (768x1024) French.xml	Nightfall		4.0	768	1024	French	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (768x1024) German.xml	Nightfall		4.0	768	1024	German	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (768x1024) Mandarin Chinese.xml	Nightfall		4.0	768	1024	Mandarin Chinese	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (800x1280) Danish.xml	Nightfall		4.0	800	1280	Danish	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (800x1280) English.xml	Nightfall		4.0	800	1280	English	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (800x1280) French.xml	Nightfall		4.0	800	1280	French	May 28, 2019 09:10:52
<input type="checkbox"/> Nightfall (800x1280) German.xml	Nightfall		4.0	800	1280	German	May 28, 2019 09:10:52

Figure 35. Screen Templates

In order to have them displayed here, you have to copy all templates file to the folder Templates. By default, it is located at: *C:\inetpub\wwwroot\Digital Sign Service\Clients\Templates*

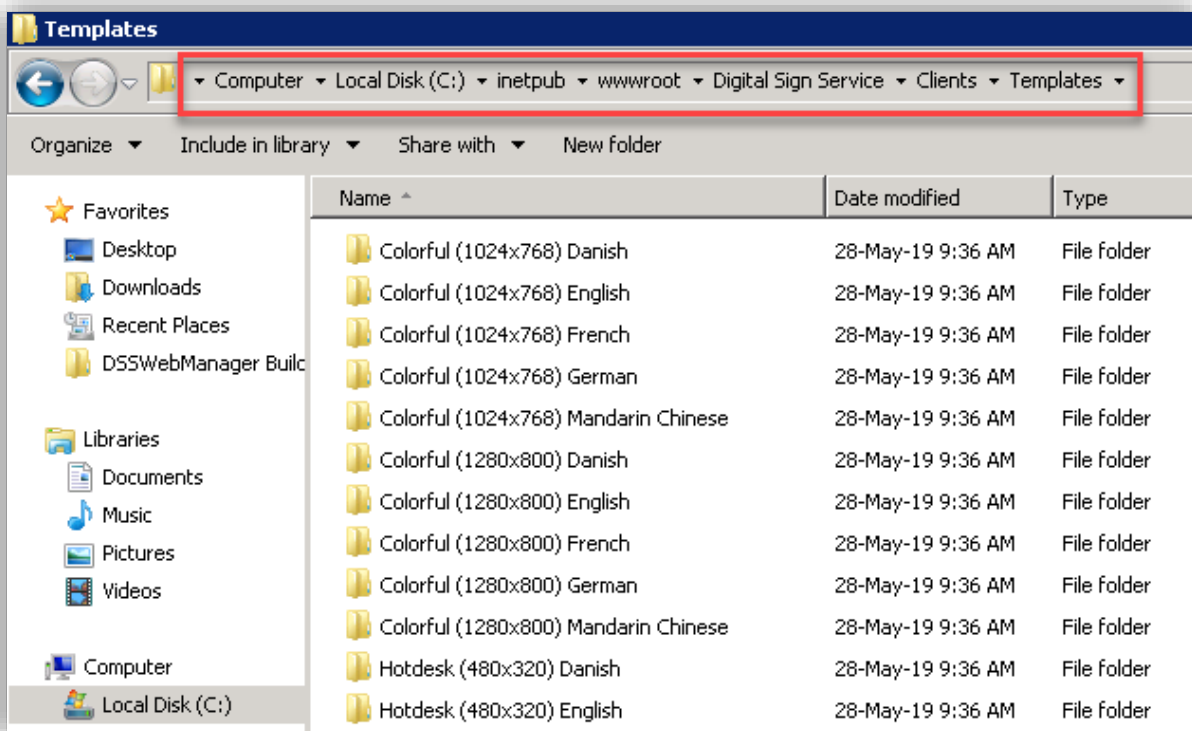


Figure 36. Template folder

Button	Description
REFRESH	Refresh the list of templates

<b>ADD NEW</b>	Open Template Editor. Refer to <i>DSS Template Editor User Guide</i> for more information on how to create a template.
<b>DELETE</b>	Delete selected templates.
<b>UPGRADE TEMPLATE</b>	Upgrade templates to new names/versions.
<b>IMPORT TEMPLATE</b>	Open panel that allows you to import a template from your machine.
<b>EXPORT TEMPLATE</b>	Export selected templates to your machine.

### Card Holders (Users)

This section allows you to create a list of users, who can interact with the devices.

To create a new user, go to **Configuration** → **Card Holders (Users)** and click [**Add New**] on the toolbar. The following panel shows up:

**Figure 37. Add a new user**

Fill in necessary information, which will be required when this user interacts with the device (book/end/extend meeting). How this information should be entered is configured in a device's details (open a device's properties → **Configuration** → **Input**) or from Client side (in **DSS Client** app, open **Setting** → **Card Information**).

Check on [**Enabled**] to activate this user in the system. Click [**Save**] to finish.