



# SmartLog Pro<sup>®</sup> Manager

## User Guide

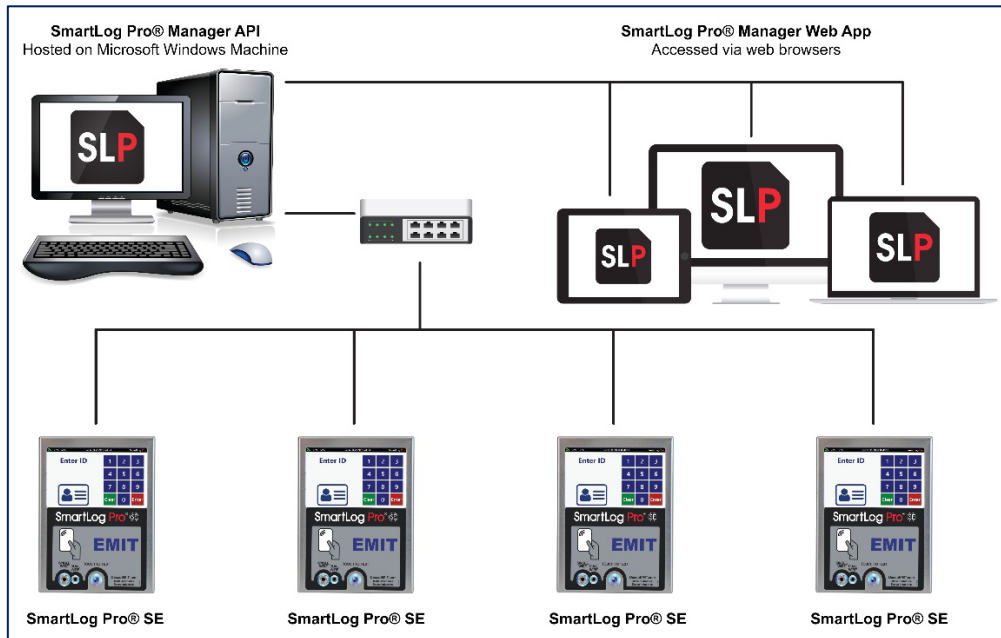
# EMIT

Overview.....	4
System Requirements .....	6
PC/Server.....	6
SmartLog Pro® SE .....	6
Server Installation.....	7
Prerequisites.....	7
IIS (Internet Information Server).....	7
Desktop OS (Windows 10).....	7
Server OS (Windows Server 2016) .....	10
URL Rewrite module for IIS .....	11
SQL Server Compact .....	11
SLP Config .....	11
Installation.....	12
SLP Backend.....	12
SLP Manager .....	13
Client software .....	14
Connected devices configuration .....	14
SLP Manager.....	17
Common functionality.....	19
List view .....	19
List title .....	20
Filtering.....	20
List operations (commands).....	21
Pagination.....	21
List header .....	22
Entity list.....	22
Name (command) column.....	22
Details view .....	23
Preview .....	25
Edit history.....	25
Export .....	26
Common controls .....	27
Autocomplete input .....	27
Date/time input.....	28
Administration.....	29
Users.....	29

Operators.....	30
Departments, Groups and Shifts .....	32
Leave Types .....	33
Mailing Lists .....	33
Locations.....	34
SmartLogs .....	35
Cloning configuration .....	37
Dashboard .....	39
Reports .....	40
Alerts .....	41
Import Operators .....	42
Automatic Operators Import.....	45
Options .....	47
Changing language .....	52
Software activation .....	52
Moving the Software.....	53

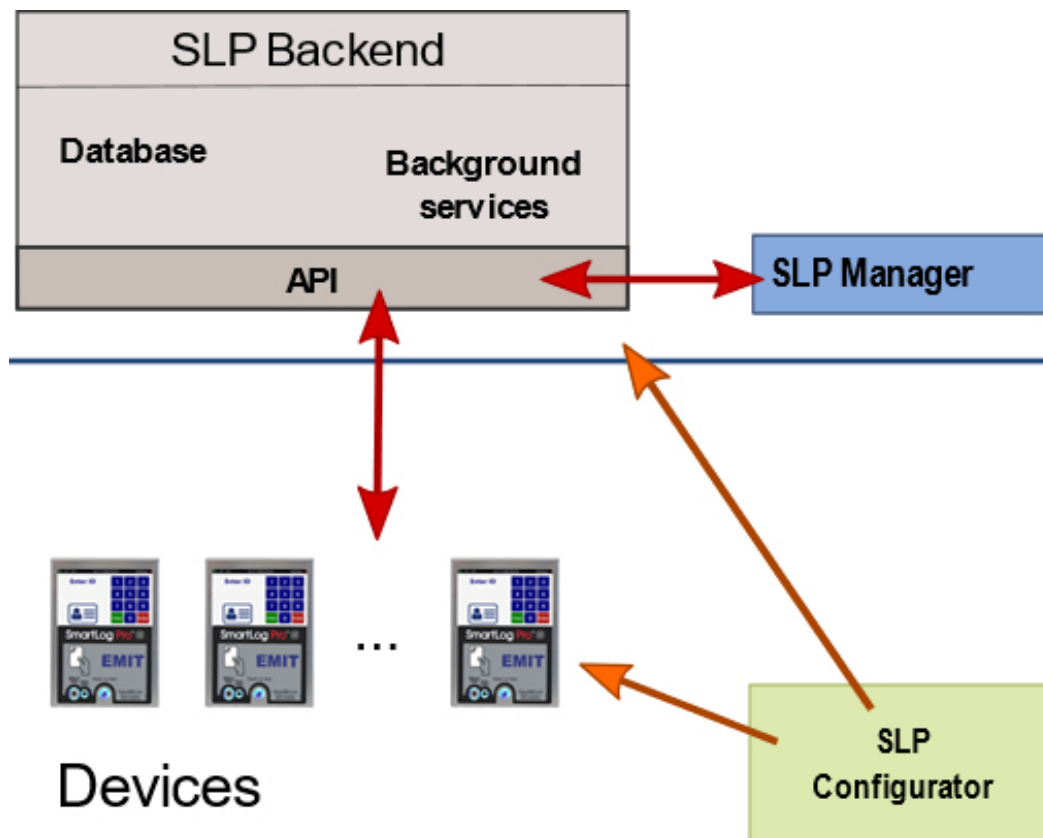
## Overview

SmartLog Pro® (SLP) Manager is distributed software system designed for control, monitoring, and management of SmartLog Pro® SE testers. The figure below illustrates the most basic and common system architecture looks like:



All devices are connected to a local network together with a computer running server software.

In general, SLP Manager has much more flexible architecture with loosely coupled components:



**SLP Backend** is the core of the whole system. It contains system data store, background processing logic and public service layer that all other components use. SLP Backend is implemented as .NET web application and hosted on IIS under Windows OS. Public services are implemented as web API (JSON over HTTP(S)).

**SLP Manager** is main system application used for administration, control, monitoring and system management. It is implemented as SPA web application (with Aurelia framework). Even though not strictly required, SLP Manager is hosted on a same computer as SLP Backend. It is also standard that SLP Manager is publicly accessible over the internet although all other scenarios are supported (local intranet, VPN, cloud).

**SmartLog Pro® SE devices** can work standalone but when connected to SLP communicate with the API in real time.

**SLP Configurator** is special application used for system components installation, configuration and upgrade.

SLP is designed for:

- reliability
- performance
- extensibility
- scalability

# System Requirements

---

## PC/Server

- Windows OS (all versions)
- IIS with ASP.NET (instructions for how to enable this are included in the installation sections below)
- Microsoft SQL Compact 4 Edition (download link is included in the prerequisites section below)
- URL Rewrite module (download link is included in the prerequisites section below)
- 4GB of RAM
- 2GB of free disk space (1GB should be enough) for server (backend and manager plus database)
- Server hosting the software requires internet access to perform the installation and to receive updates hosted on the Desco website. If not allowed or available, alternative options are available. Please contact EMIT Customer Service for further details.
- Microsoft Edge or another current Internet Web Browser (Firefox, Safari, Chrome, etc.). The software **cannot be used** with Microsoft Internet Explorer

## SmartLog Pro® SE

- Device must reside on the same subnet as the server hosting the data for the initial configuration of the server location (an alternative method is available if this is not possible; see the Connected Devices Configuration section below)
- DHCP and UDP need to be enabled. UDP broadcasts are performed during the initial setup using UDP port 9111
- Communicates via HTTP from client device to server after initial set up
- Internet access is recommended to obtain the local time/date on the SmartLog Pro® SE. If this is not allowed or available, the SmartLog Pro® SE will synchronize time/date with the Web Manager Software hosted on the Server.

# Server Installation

## Prerequisites

### IIS (Internet Information Server)

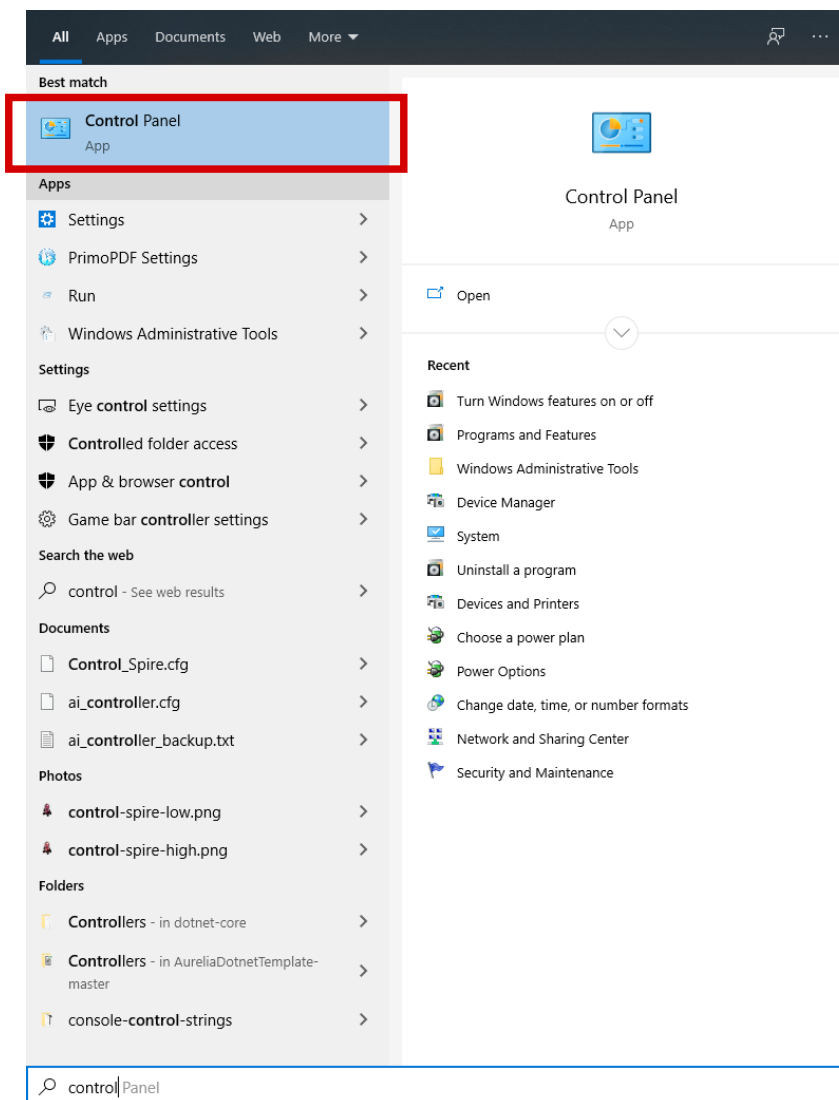
SLP Backend is implemented as ASP.NET Web API encapsulating entire application logic, working with system data store (database), generating reports, sending e-mails, etc. To make all of this possible, target machine (server) must have Microsoft IIS installed (enabled) and configured properly.

#### Desktop OS (Windows 10)

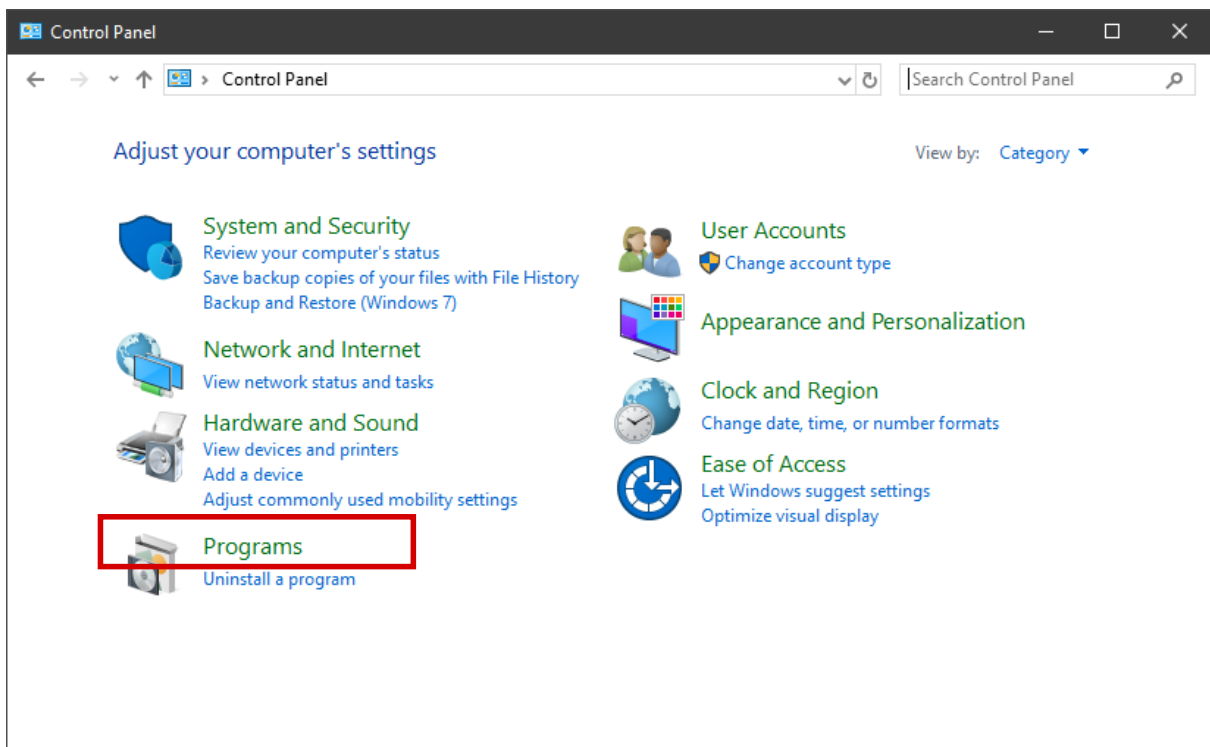
On windows desktop systems IIS is enabled on **Control Panel -> Programs:**

#### Step 1: open Control Panel

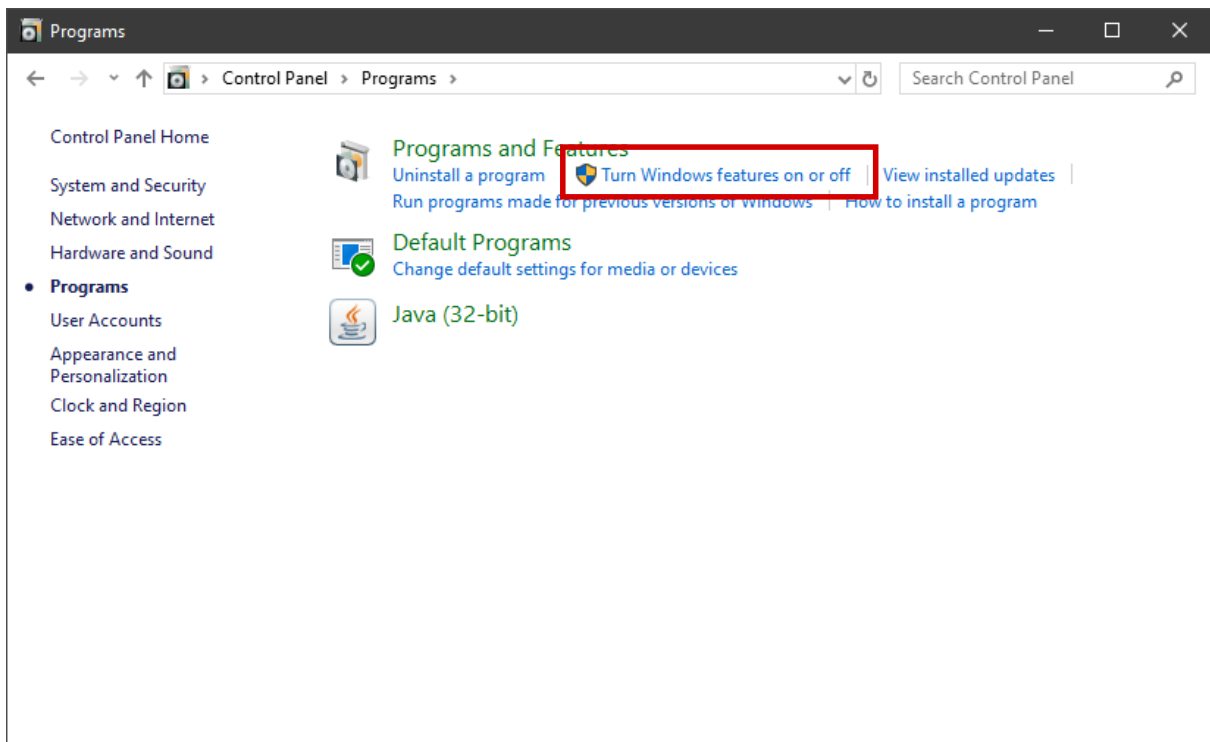
Use Windows search box:



## Step 2: click on Programs

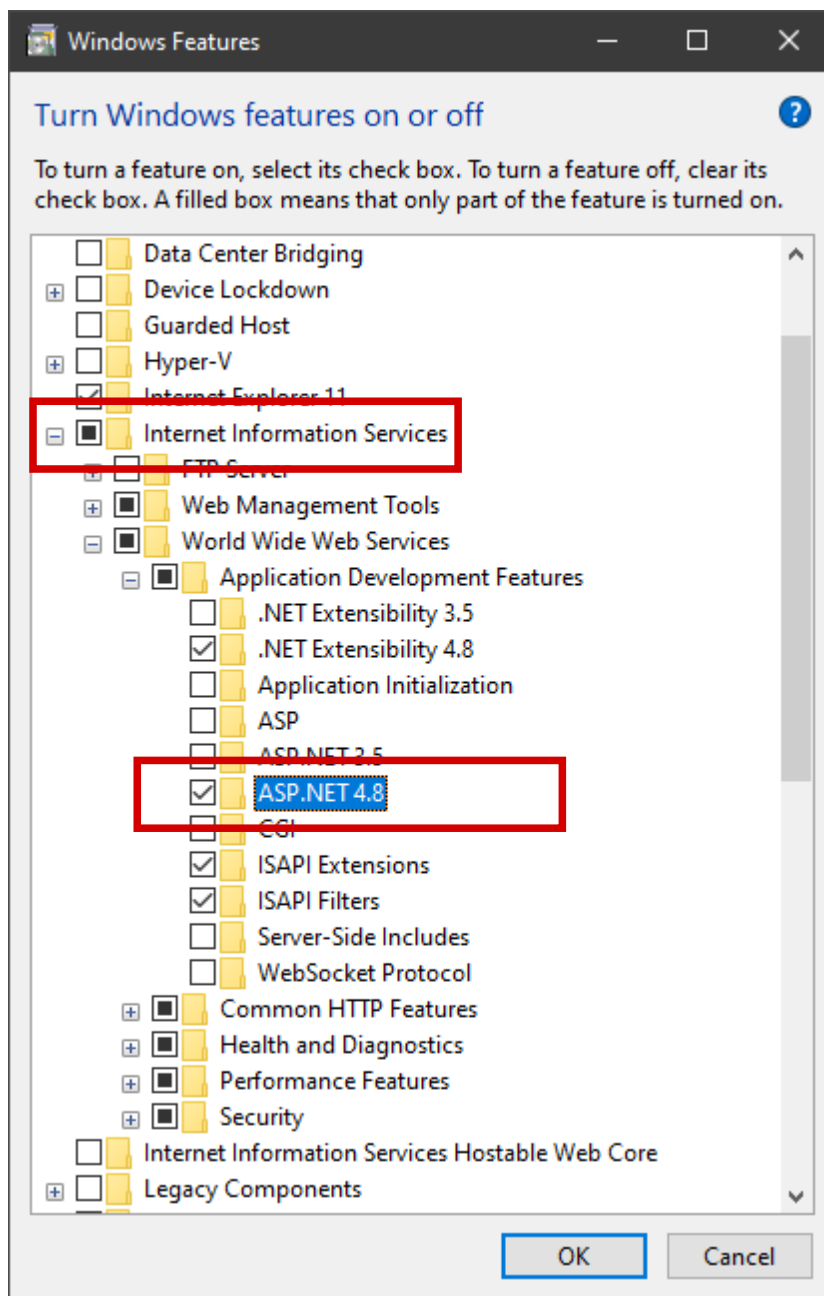


## Step 3: click on Turn Windows features on or off





#### Step 4: enable Internet Information Services and ASP.NET 4.8



- click on checkbox left of **Internet Information Services** (this will select default options)
- click on plus sign left of that checkbox to expand IIS node
- expand (click on plus) **World Wide Web Services** node
- expand (click on plus) **Application Development Features** node
- select (click on checkbox) **ASP.NET 4.8**
- click **OK**

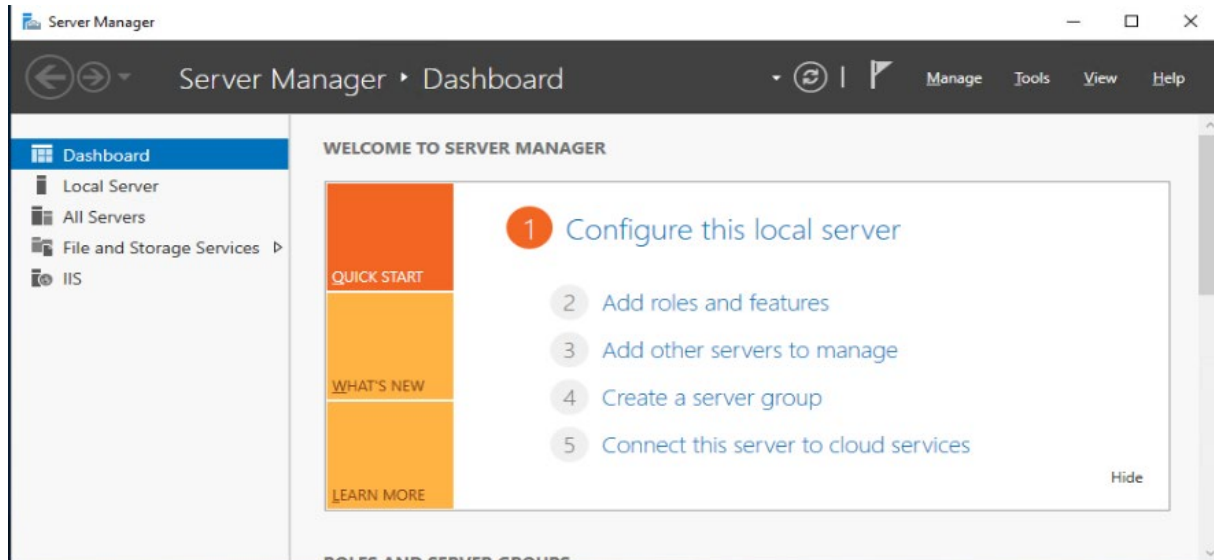
#### NOTE

Follow steps above if IIS isn't installed on desktop computer. If it is already installed and enabled, please check if ASP.NET 4.8 feature is enabled and enable it if necessary.

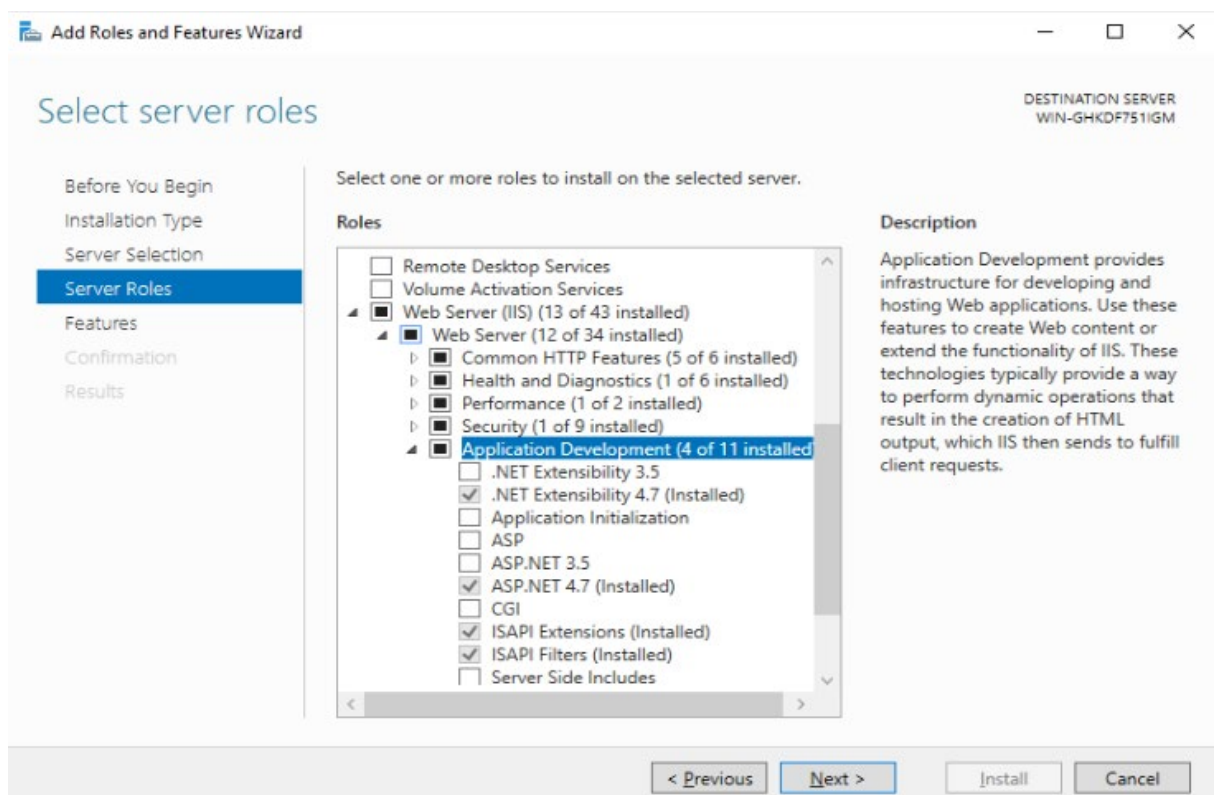
## Server OS (Windows Server 2016)

Installing (enabling) IIS on Windows Server OS is quite similar to an installation on Windows desktop OS (see details above).

Installation is started from **Server Manager**



by clicking on **Add roles and features**. What remains to be done is enable **Web Server (IIS)** and also enable **ASP.NET 4.7** under **Application Development** (if IIS is already enabled, enable ASP.NET 4.7 if necessary).



## URL Rewrite module for IIS

Microsoft URL Rewrite Module 2.0 for IIS is free and official download is available from [Microsoft](#).

### NOTE

URL rewrite module is required for **SLP Manager** web application only. If target machine host only SLP Backend then this module is not necessary.

## SQL Server Compact

SLP stores data by default in Microsoft SQL Compact database. Free official download is available from [Microsoft](#).

### NOTE

Database is required for **SLP Backend** only. If target machine host only SLP Manager then this download is not necessary.

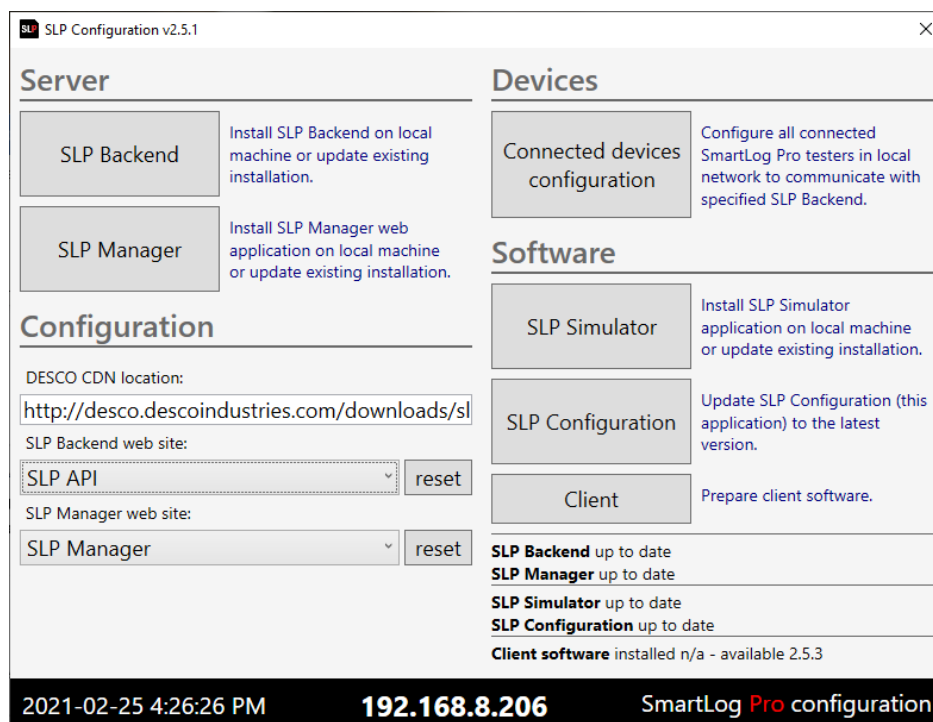
## SLP Config

SLP Config is application used for SLP components installation, configuration and maintenance. Contact EMIT Customer Service to be provided with a download link.

- download **ConfigSetup.msi**
- run downloaded setup application

Setup program will install **SLP Config** application on local machine (in folder C:\Desco\SlpConfig by default) and create desktop icon.

This application is designed to greatly simplify installation and system maintenance (see details in next chapter).



## Installation

Once all prerequisites are fulfilled (see above), SLP Config application provides quick and easy method for server installation. It is designed for most common scenario (intranet, server components on single computer) but it is also possible to use it in more advanced scenarios like having server components on separate machines, configuring web applications created using IIS, etc.

SLP Config is also the right tool for upgrading to new version, (re)configuration and reinstall.

### INFO!

If during the installation (or when upgrading) you are unable to connect to the EMIT content delivery network (CDN) please contact EMIT Customer Service to be provided with download links to the files with the deploy/update packages for **SLP Backend** and **SLP Manager**. In each section for these you may direct the Application Installation Package location to a file instead of the CDN. A selection button is provided to locate the appropriate file in the location you saved it on the server. This will allow you to install or upgrade directly from the downloaded file instead of needing to connect to the CDN.

## SLP Backend

To install SLP Backend follow these steps:

1. Ensure prerequisites
2. Start SLP Config
3. Click on SLP Backend button
4. Pick installation folder (C:\Desco\SLP\API is default)
5. Pick port (17200 is default, change only if that one isn't feasible)
6. Pick folder for database (C:\Desco\SLP\Data is recommended)
7. Click on Install button

SLP Config will download installation package from the EMIT content delivery network (make sure that this was set correctly on previous screen – default should usually work fine) and set up everything.

Once installation is done click on Root link to verify that everything is fine – browser should open web page containing text **SLP API, © 2020. DESCO**

SLP Configuration v2.5.1

Site name: **SLP API** Upgrade Configure

Folder: C:\Desco\SLP\API ...

Port: 17200

Root: <http://CA1-VICTORA:17200>

Data folder: C:\Desco\SLP\Data ... Auth header: SLP.AH

Application installation package:

☒ Get from CDN

☐ File ...

Close

2021-02-25 4:28:25 PM 192.168.8.206 SmartLog Pro configuration

## SLP Manager

It is recommended to install SLP Backend before Manager, that way it won't be necessary to manually type API Root location.

To install SLP Manager follow these steps:

1. Ensure prerequisites
2. Start SLP Config
3. (Optional) install SLP Backend (see comment above)
4. Click on SLP Manager button
5. Pick installation folder (C:\Desco\SLP\Admin is default)
6. Pick port (17205 is default, change only if that one isn't feasible)
7. Pick API Root (if not set automatically to proper root)
8. Click on Install button

SLP Config will download installation package from the EMIT content delivery network (make sure that this was set correctly on previous screen – default should usually work fine) and set up everything.

Once installation is done click on Root link to verify that everything is fine – browser should SLP Manager login page (see details about SLP Manager in the following chapter).

SLP system is built from loosely coupled components. In particular, backend and manager may be located on different computers and even on different domains. In some cases, it may even be that there are several backends (on different networks and domains) and single manager is used to “switch” between them. In those cases, API Root obviously won't be default one and has to be typed

in manually. If, for example, backend (API) is hosted on *slp.mydomain.com* then API Root should be set to <http://slp.mydomain.com/api> (/api suffix is important!).

Auth header settings is part of advanced configuration. Advanced configuration and upgrade scenarios will be explained in detail in appendix.

## Client software

---

Software updates for SmartLog Pro® SE devices are also streamlined using standard mechanism provide by SLP Config. As with other software components, SLP Config will inform about new version availability (on EMIT content delivery network). Click on **Client** button will fetch latest version from the EMIT content delivery network (CDN) and make it available for all connected client devices via SLP Manager.

SLP Manager will inform all connected devices of update available but it won't trigger update automatically. In order to update SmartLog Pro® software, admin must login and start update manually. This is by design to avoid possible awkward situations of update starting in the middle of test, missing important updates, installing unwanted updates, etc.

Client software update is quick and simple using SLP Config:

- check for update availability on content delivery network (CDN)
- if new update exists fetch it to SLP Manager (using SLP Config)
- each connected SmartLog Pro® SE will indicate update availability
- if update is desired, start it from admin screen

## Connected devices configuration

---

Final step in SLP installation is configuring SmartLog Pro® SE devices to “talk” to the backend. Devices are “plug & play” by design and SLP Config simplifies task of initial configuration of server location.

### NOTE

This task should get repeated whenever new device is added to the system or whenever location of SLP backend changes for some reason.

SLP Config is capable of broadcasting backend location to local network (using special UDP message). The SmartLog Pro® SE devices must reside on the same subnet as the server hosting the data for the initial configuration of the server location. All connected SmartLog Pro® SE devices that are active will automatically pick up that message, acknowledge and (re)configure their backend location.

### NOTE

If for some reason the SmartLog Pro® SE devices and the server hosting the data are not or cannot be on the same subnet, it is possible to enter the backend location (API Root) at the SmartLog Pro® SE device manually by accessing the Admin Menu using an administrator ID number on the keypad (the default administrator ID number is 0) and pressing enter, tapping the Misc option, entering/modifying the API Root via the virtual keyboard on that screen and saving it. You must be using client software version 2.5.21 or higher to utilize this option. A USB keyboard may be plugged into one of the dual USB ports on the back of the unit to make typing easier.

It is also possible to install just the SLP Config program on a secondary computer that is on the same subnet as the SmartLog Pro® SE devices. The SLP Config may be used from that secondary

computer for the configuration of the connected devices only. Please contact EMIT Customer Service for further details.

**INFO!**

If SmartLog Pro® SE isn't sending events to SLP then most probable cause is invalid or missing SLP Root information. Run SLP Config to fix that.

This configuration step is started by clicking on Connected devices configuration button

SLP Configuration v2.5.1

SLP Root:  Auth header:

Connected configured devices:

2021-02-25 4:29:54 PM 192.168.8.206 SmartLog Pro configuration

First ensure that **SLP Root** is set correctly and then click Start button. All connected devices will soon appear in Connected configured devices list.

Note that the SLP Root is in fact the location of SLP Backend **but without /api suffix**.

Once devices are configured (which will happen quickly) there is no need to leave broadcast active – just Stop and exit. This configuration procedure is a quick one and should get invoked occasionally when new devices need configuration or when system is reconfigured.

**NOTE**

Every connected SmartLog Pro® SE will communicate with SLP and “reveal” its presence. If it doesn't exist yet in the system, it will show (with serial number) in **Unknown Devices** on the SLP Manager dashboard. (See the **Dashboard** section below for more details).

Recommended way of adding devices to the system is to use this “plug and play” feature:

- connect SmartLog Pro® SE to the network and configure it to communicate with SLPConfig
- use Unknown Devices on the Dashboard to attach it to the system

- give it descriptive name

Name isn't strictly required but it will show on all reports, alarms and previews.

It isn't necessary to set all other attributes right away (defaults are most commonly used settings)

– this can be left for later fine-tuning step.



## SLP Manager

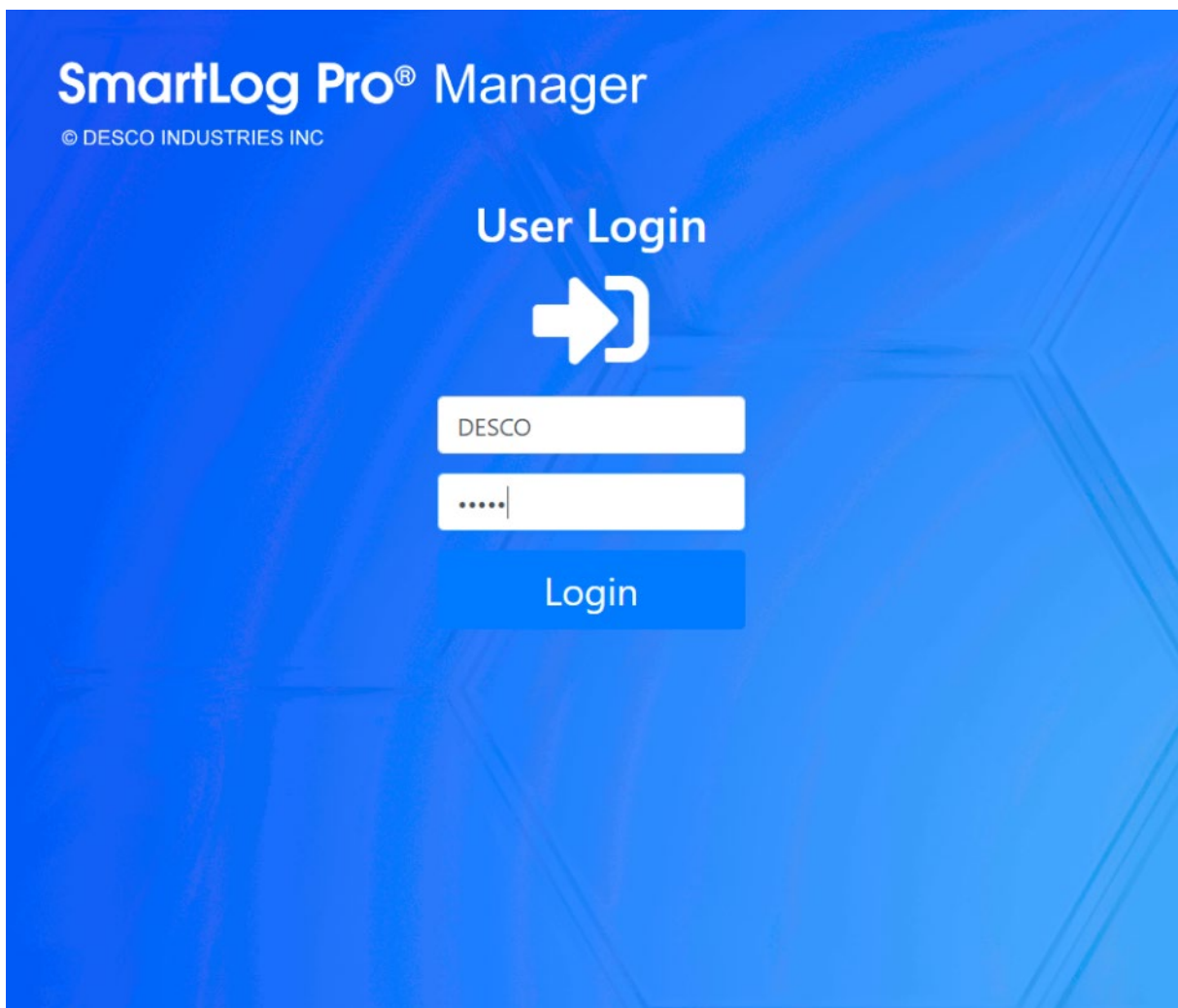
---

SLP Manager is web portal that is a central point of SLP system. It is designed to provide:

- Management (administration) of system entities like operators, SmartLogs, departments, shifts, etc.
- Constant monitoring of system state including versatile query, reporting and alert features
- Controlling operational parameters of SmartLog Pro® SE devices as well as operators
- Exporting data in various formats (Excel, html, text, e-mail)
- Importing operators from external data sources
- Controlling overall SLP operation

SLP Manager is implemented with special attention to simplicity, ease of use and performance. User interface is standardized as much as possible across various screens and forms.

When started, SLP Manager requires user authentication:



With every installation comes predefined user with username **Desco** (letter casing is not important) and password **desco** (letter casing important!). This user has role **Owner** and therefore full administrative system rights.

## WARNING!

Keeping this predefined user is considered serious security risk!

It is advised to create new user with full rights immediately and delete predefined user:

1. open **Users** (under **Administration**)
2. click on **New User**
3. define new user – set role to Admin or Owner (important!)
4. logout predefined DESCO admin (on the sidebar menu)
5. login with created user
6. if everything is fine, go to Users again and delete DESCO Admin (red delete button)

If SLP Manager is installed and configured properly to connect to SLP Backend api layer, it will open system dashboard

**SmartLog Pro® Manager**

Administration  
Reports  
Alerts  
Tools  
Language  
Logout DESCO Admin  
© 2020 DESCO INDUSTRIES INC. version 1.1.11 expires 06/16/2025  
Activate

### Recent ESD tests

Time	Operator	SmartLog	Test Type	Result
08/27/2020 1:28 PM	Kristian Ackar	Roberto's SmartLog	Footwear Only	Pass
08/27/2020 1:27 PM	Kristian Ackar	Roberto's SmartLog	Foot and Wrist	Fail
08/27/2020 1:09 PM	Kristian Ackar	Roberto's SmartLog	Foot and Wrist (Optional)	Fail
08/27/2020 1:08 PM	Kristian Ackar	Roberto's SmartLog	Foot and Wrist (Optional)	Fail
08/27/2020 1:06 PM	(5875)	Roberto's SmartLog	Foot and Wrist (Optional)	Fail
08/27/2020 1:06 PM	(554433)	Roberto's SmartLog	Foot and Wrist (Optional)	Fail
08/27/2020 1:06 PM	Kristian Ackar	Roberto's SmartLog	Foot and Wrist (Optional)	Fail
08/27/2020 1:04 PM	Kristian Ackar	Roberto's SmartLog	Foot and Wrist	No test
08/27/2020 8:47 AM	Kristian Ackar	Roberto's SmartLog	Foot and Wrist	Fail
08/26/2020 7:12 AM	0	(159840298394)	Foot and Wrist (Optional)	Fail

### Operator last known ESD status

Time	Operator	SmartLog	Test Type	Result
08/27/2020 1:28 PM	Kristian Ackar	Roberto's SmartLog	Footwear Only	Pass
08/26/2020 7:02 AM	TX Test 1	(159840298394)	Foot and Wrist (Optional)	Pass
08/26/2020 5:26 AM	TX Test 2	(159840298394)	Footwear Only	Pass
08/23/2020 8:18 AM	Test88	Roberto's SmartLog	Foot and Wrist (Optional)	No test
08/21/2020 7:59 AM	Fran M M M M M M M M W W	(159798795646)	Foot and Wrist (Optional)	No test
08/19/2020 10:49 PM	Matija Spiljak	Branko	Foot and Wrist (Optional)	Pass
08/11/2020 8:27 PM	FirstFirstFirst 123456789123456789	Victor	Foot and Wrist (Optional)	Fail

### Unknown Locations

192.168.1.9 [/ Attach](#)

### Failed ESD tests

Within last 12 hours Page size 20

Time	Operator	SmartLog	Test Type	Result
------	----------	----------	-----------	--------

### SmartLogs with high FAIL rate

Within last 12 hours Page size 20

SmartLog	# Tests	Pass	Fail	No test
----------	---------	------	------	---------

### Operators with high FAIL rate

Within last 12 hours Page size 20

Operator	# Tests	Pass	Fail	No test
----------	---------	------	------	---------

Navigation menu is located on the left sidebar which also contains logout button, licensing information and Activate button. Sidebar title (SmartLog Pro Manager) is a link to “home” page – system dashboard.

Main part of system dashboard is composed of “widgets”. Available widgets are:

- Unknown Locations
- Unknown SmartLogs
- Recent ESD tests
- Operator last known ESD status
- Failed ESD tests
- SmartLogs with high FAIL rate
- Operators with high FAIL rate

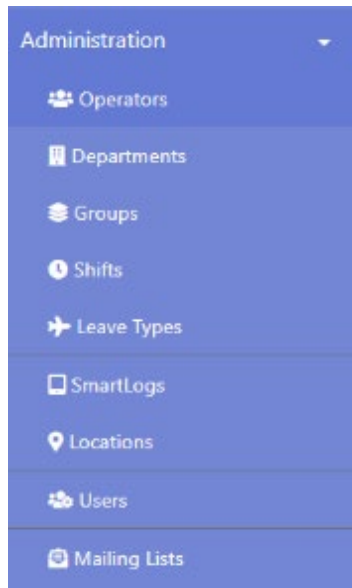
It is possible to hide or configure any widget, detailed explanation follows in section dedicated to system options.

System dashboard is “live”, it refreshes automatically to always reflect current system status.

SLP Manager is a “responsive” web application. It will fit and rearrange on smaller screens (tablets, mobile).

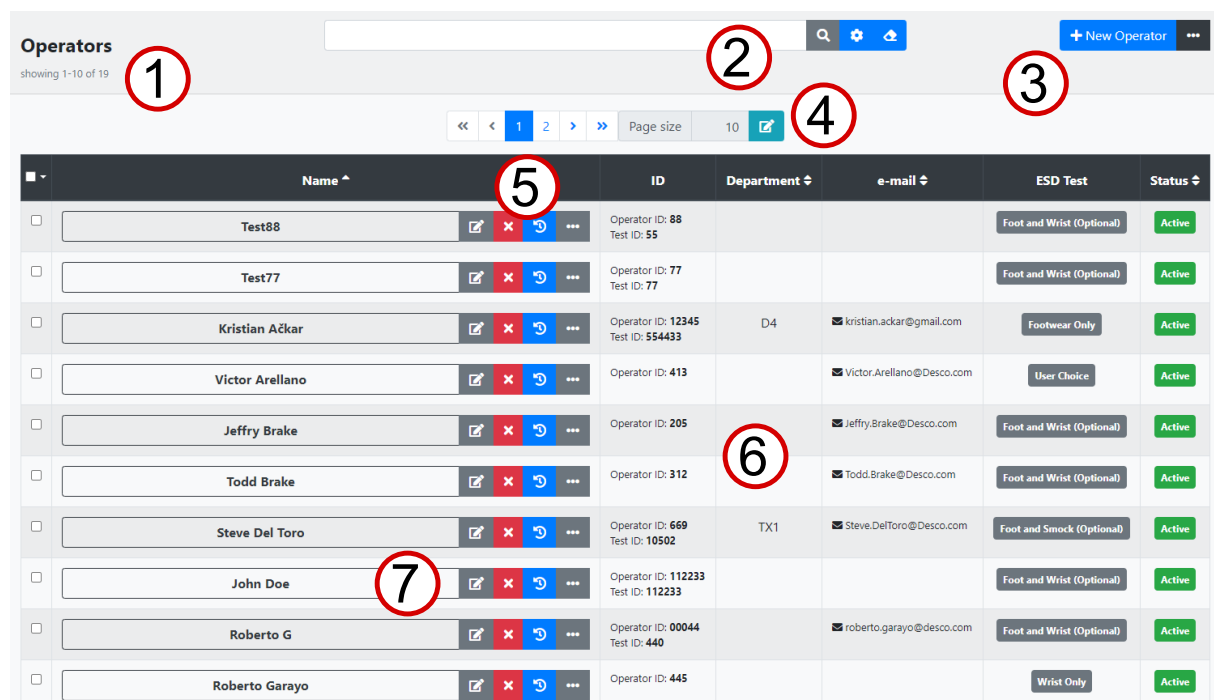
## Common functionality

SLP Manager uses common master/detail paradigm. Management of all system entities is located under **Administration** menu:



Clicking on, for example, **Operators**, opens standard “master” (list) view.

### List view

A screenshot of the 'Operators' list view in SLP Manager. The interface includes a header with the title 'Operators' and a count 'showing 1-10 of 19'. Below the header is a search bar and a '+ New Operator' button. A pagination bar shows 'Page size 10' and navigation controls. The main table lists operators with columns for Name, ID, Department, e-mail, ESD Test, and Status. Each row has a checkbox and a set of action icons (edit, delete, refresh, etc.). Numbered callouts (1-7) highlight specific features: 1. Title and count, 2. Search bar, 3. '+ New Operator' button, 4. Page size and navigation, 5. Table header, 6. Table body, 7. Action icons.

Operators		showing 1-10 of 19		Page size 10		+ New Operator	
Name	ID	Department	e-mail	ESD Test	Status		
<input type="checkbox"/> Test88	Operator ID: 88 Test ID: 55			Foot and Wrist (Optional)	Active		
<input type="checkbox"/> Test77	Operator ID: 77 Test ID: 77			Foot and Wrist (Optional)	Active		
<input type="checkbox"/> Kristian Aćkar	Operator ID: 12345 Test ID: 554433	D4	kristian.ackar@gmail.com	Footwear Only	Active		
<input type="checkbox"/> Victor Arellano	Operator ID: 413		Victor.Arellano@Desco.com	User Choice	Active		
<input type="checkbox"/> Jeffry Brake	Operator ID: 205		Jeffry.Brake@Desco.com	Foot and Wrist (Optional)	Active		
<input type="checkbox"/> Todd Brake	Operator ID: 312		Todd.Brake@Desco.com	Foot and Wrist (Optional)	Active		
<input type="checkbox"/> Steve Del Toro	Operator ID: 669 Test ID: 10502	TX1	Steve.DelToro@Desco.com	Foot and Smock (Optional)	Active		
<input type="checkbox"/> John Doe	Operator ID: 112233 Test ID: 112233			Foot and Wrist (Optional)	Active		
<input type="checkbox"/> Roberto G	Operator ID: 00044 Test ID: 440		roberto.garayo@desco.com	Foot and Wrist (Optional)	Active		
<input type="checkbox"/> Roberto Garayo	Operator ID: 445			Wrist Only	Active		

Every list view in SLP Manager looks similar and has similar standard parts and associated functionality:

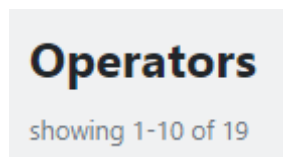
1. Title with overall entity count
2. Filtering
3. Available operations (including creating new entities)

4. Pagination
5. List header with sorting and select all
6. List of filtered entities
7. First column with entity name and a set of available operations

Operators list example above contains all possible components. Some other entity (or report) lists may not contain parts and commands that are not relevant. List view will always adapt seamlessly.

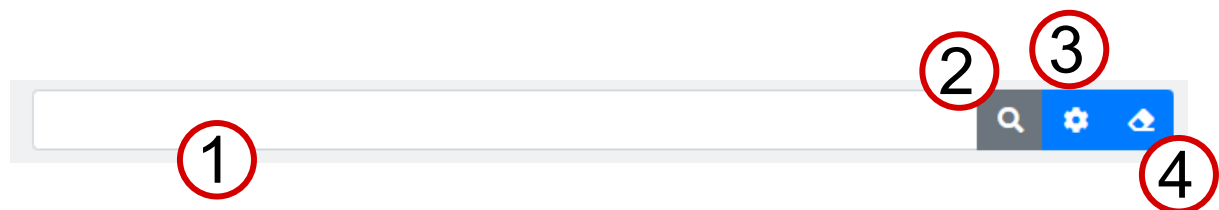
### List title

List title contains the title that describes associated list and also information about overall (filtered) entity count as well as information about entities shown.



### Filtering

Every list can be filtered in various ways:



1. term entry field
2. search button
3. advanced filter button
4. clear filter button

The most basic, yet quite powerful options is filtering by term. It can be done simply by entering any text in term entry field and pressing Enter (or clicking on search button). List will immediately filter to show only entities that “contain” entered term.

For example, entering **Jo** for search term in our operator example would match names like John, Jonny, Bill Lojor, ... - anything containing “jo” (letter casing is irrelevant).

#### NOTE

SLP term matching is more extensive. For each entity a set of “term” attributes is defined. In our operator example search above would also match operator with e-mail address [tester@mojo.work](mailto:tester@mojo.work).

Term search is also sensitive to operator Ids, test Ids, card numbers, etc – use it to quickly find/check operator with ID 12345.

For more advanced scenarios there is advanced filter option. It provides additional meaningful filtering options. Advanced filter automatically adapts for related entity – for operators it is:

## Advanced Filter

show only operators that satisfy:

Status <input type="text"/> Active ✕ Inactive ✕	Department <input type="text"/> D2 ✕
Group <input type="text"/>	Shift <input type="text"/>

Apply

Clicking on Apply button (or on search button in filter bar) will filter list accordingly.

Advanced (extended) filter button in filter bar toggles visibility of advanced filter form.

Finally, clear filter button clears any filtering criteria. It is equivalent to “show all” command.

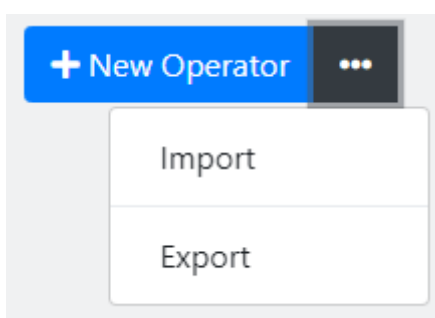
### NOTE

Advanced filter and clear filter buttons indicate whether any filtering is applied. They will turn blue if filtering (including term filter) is active and grey otherwise.

Some list views by default already contain predefined filtering. For example, operator list is filtered to show only active and inactive operators.

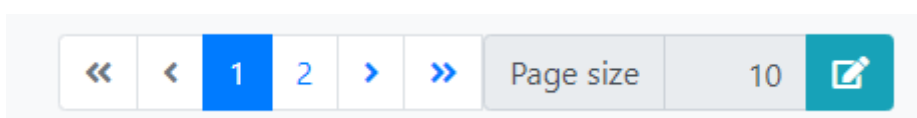
## List operations (commands)

Every list view is starting point for related entity management (create, modify, delete) and therefore contains New command. Some lists may contain additional commands – for operators it is:



## Pagination

It is rarely useful to have large lists on screen, SLP Manager uses standardized pagination

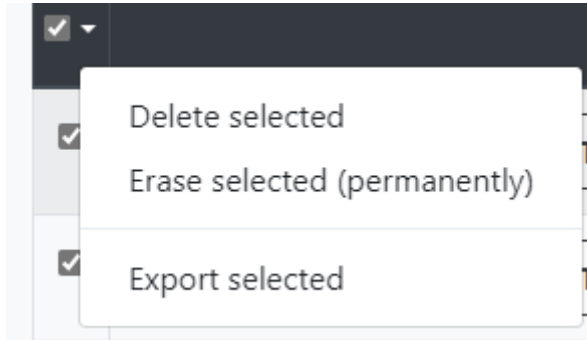


consisting of pager and control for adjusting page size. Pagination is visible only if necessary, i.e. if there are more entities than those shown.

### List header

List header contains titles and some of them are clickable as indicated by mouse cursor and arrows to their immediate right. Clickable titles are used to sort the list – clicking on title toggles between ascending and descending sort on related attribute.

In the leftmost column there is a check box with drop-down menu. For operators it looks like



Checkbox is used to select/deselect all and drop-down menu contains commands relevant for current selection.

### Entity list

List body simply contains a list of (filtered) entities with predefined columns shown.

In the leftmost column there is a checkbox used for selecting/deselecting individual item.

On smaller screens list with many columns may not fit into viewport. If that happens then list becomes scrollable (left/right).

### Name (command) column

First column always contains entity name (or description) and a set of relevant commands



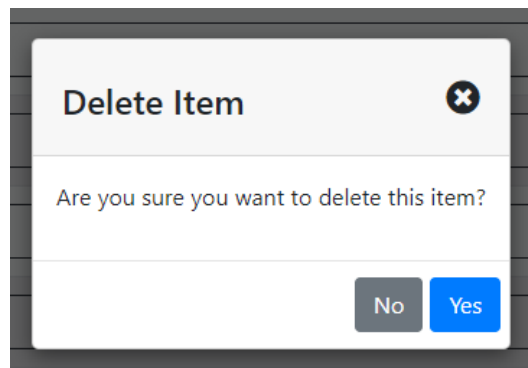
Standard operations (commands) on every entity are edit (modify), delete and preview.

Preview is not available always (only for complex entities and reports). In our operator example, name is in fact a button. When clicked, operator preview will open in popup form.

For some list views (reports in particular), whole row becomes preview trigger. Availability of preview is noticeable by cursor change in that case.

In operator list there is separate edit button next to operator name. For simpler entities (Departments for example) this button won't show! Since simple entities don't have preview option, clicking on name will open edit (details) form instead.

Delete button is red button with cross. Deleting will always ask for confirmation



#### NOTE

SLP uses concept of soft vs. hard delete. Hard delete removes entity from the system and it isn't reversible (can't be undone). On the other hand, soft delete only marks entity as deleted but keeps it in the system. Soft delete is equivalent to setting entity status to Deleted.

Soft delete is simply called "delete" and hard delete is called "erase" in SLP. Complex entities have Status attribute and have both soft and hard delete available. Simple entities do not have status and have only hard delete available (for them delete=erase).

Hard delete may not succeed. If removing entity would disturb consistency of data (entity is referenced somewhere) then erase fails with informative message.

Some entities have additional commands. In case of operator those are: (change) history, erase and leaves.

### Details view

---

Entities are created and edited using details view (form). They are always invoked using either Create New or Edit command on list view (see previous section for details). In some cases, they are very

simple and sometimes show quickly as popups. In some cases, they can be complex and contain multiple tabs (for example, SmartLog form)

The SmartLog form is a configuration interface for a device. It features a header with the 'SmartLog' title and a 'Save' button. The form is organized into sections: a top section for basic identification (Name, Serial, Status), a tabbed interface for configuration (General, Access, Restrictions, ESD Test), and a bottom section for advanced settings (Language, Date/Time display format, Buzzer volume, Calibration due, Timeouts, and Operation Mode). The 'General' tab is currently selected, showing settings like 'English' for language, 'F' for date/time format, '1' for buzzer volume, and various timeout values. The 'Save' button is located in the top right corner of the form.

Details view always contains two commands: back (grey left arrow) and Save (blue button). Back command will return to previous location (list view) but will prompt if changes were made:

This is a modal dialog box titled 'Unsaved changes!'. It contains the text 'Are you sure you want to exit before saving changes?' and two buttons: 'No' and 'Yes'. The 'Yes' button is highlighted in blue, indicating it is the default action.

Save will save changes made (if there were any) and return to previous location (list view).



## Preview

Preview is another standard SLP Manager feature. It is available for complex entities, edit history and for various reports, for example:

**ESD Test details**

🕒 08/26/2020 7:02 AM      👤 TX Test 1 (1111)

📍 (159840298394)      📍 (192.168.2.105)

🔋 58%      🌡️ 44°C

Foot and Wrist (Optional) **Pass**

Wrist: **Pass** W1: 2.0M    W2: 2.0M      Left Foot: **Pass** 4.4M      Right Foot: **Pass** 7.3M

Preview is always shown in popup window that can be closed using close button (grey button with cross) or simply by pressing **Escape** key.

## Edit history

Operators and SmartLogs are most important entities in the system. For both SLP implements full modification history (blue button in list view, see above). Clicking on it will bring up

**Operator edit history**

Time	Performed by	Action
05/19/2020 7:38 PM	DESCO Admin	<a href="#">Update</a>
04/28/2020 9:53 PM	DESCO Admin	<a href="#">Update</a>
04/28/2020 9:52 PM	DESCO Admin	<a href="#">Update</a>

while clicking on each item (row) will open preview – snapshot of entity state at that point of time.

Note that if there were many edits this popup list may become quite long.

## Export

Export is standard feature of all reports (including alerts history) in SLP Manager. It is also available on operators list view to export filtered (sub)set of operators.

Primary purpose for export is to establish standard data interchange mechanism with external systems and applications and, therefore, supports standard formats:

- Excel
- tab and comma delimited text
- PDF

Export capabilities are extended (for reports) also with:

- PDF preview (useful for print)
- e-mail

All report and alert pages contain in the top right corner



And clicking on Export brings up a form for customization

A screenshot of the 'Export' dialog box. It has a title bar 'Export' with a close button. The form contains a text field for 'SmartLog Summary', a 'File name' label, a toggle for 'Column names in first row' which is turned on, a dropdown menu for 'Format' showing 'Excel 2007+', and a section titled 'Columns:' with a table of columns to be exported. The table has a checkbox column and a 'Column' header. The columns listed are 'SmartLog', '# Tests', 'Pass', 'Fail', and 'No Test', all with checked checkboxes. At the bottom are 'Cancel' and 'Export' buttons.

Column
<input checked="" type="checkbox"/> SmartLog
<input checked="" type="checkbox"/> # Tests
<input checked="" type="checkbox"/> Pass
<input checked="" type="checkbox"/> Fail
<input checked="" type="checkbox"/> No Test

that enables columns (attributes), output format and file name selection.

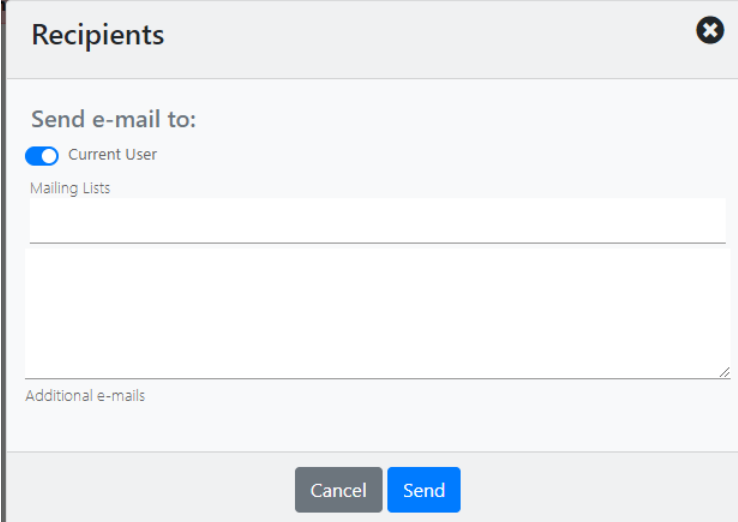
Clicking Export will create report in SLP backend and download created file.

#### NOTE

Export always contains current filtered selection. Use standard filtering and sorting to produce desired output.

PDF option (button) is similar to selecting PDF for data format in Export but it opens resulting PDF document in a new browser tab. This can be considered as enhanced print preview option.

Finally, e-mail button brings up recipient selection form:

A dialog box titled "Recipients" with a close button in the top right corner. It contains a section "Send e-mail to:" with a toggle switch for "Current User" which is turned on. Below this is a text area labeled "Mailing Lists" which is currently empty. At the bottom of the dialog are two buttons: "Cancel" and "Send".

Additional e-mails can contain multiple e-mail addresses separated by commas, semicolons, or spaces.

## Common controls

SLP manager uses standard UI controls – buttons, input fields, dropdown lists, checkboxes, switches, etc. but also some specialized:

### Autocomplete input

Autocomplete looks and works like standard input field but reacts to input by displaying “suggestions” – a list of system entities that contain entered text:

A screenshot of an "Operator" input field. The text "te" is entered into the field. Below the input field, a dropdown list of suggestions is displayed. The suggestions are: "Test77", "Test88", "TX Test 1", "TX Test 2", "TX Test 3", and "Steve Del Toro". The first suggestion, "Test77", is highlighted with a blue background.

Pressing **Enter** key will “complete” input with highlighted suggestion.

It is also possible to use down/up arrows to change highlighted choice or simply click on desired one.

#### NOTE

It is also possible to list “all” available choices without typing in the hint. This is done by pressing **Down Arrow** while input field is empty. Autocomplete will then display available entities.

Autocomplete suggestion list is always limited to **first 12 matches**.

Suggestions are not lexically sorted; they are shown in random order.

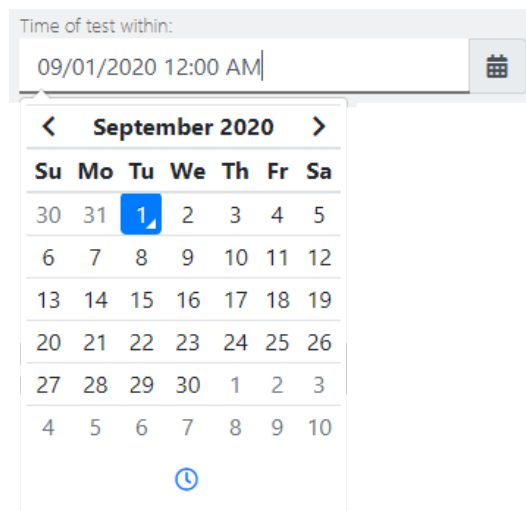
Autocomplete is a time-saver reducing required typing and shows full potential in cases when user knows (at least partially) what she is looking for. This control is used through SLP Manager for selection (from potentially large list).

Autocomplete input has “multi” variant and can also pick multiple choices. In this case it is combined with selection list control:



#### Date/time input

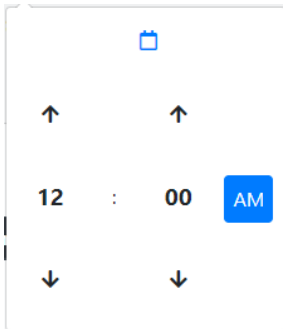
In every place where date or time input is required SLP Manager uses special input control:



It consists of normal input field (where date/time can be typed in) extended with a button that brings up calendar (and/or clock) control.

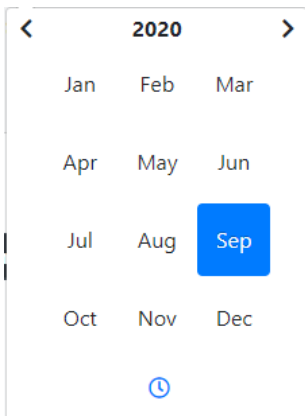
If expected input is time only, control will show only time picker, if it is date only then time picker won't be available. In general case it looks like the one above.

Clicking on clock icon at the bottom will switch to time input



and calendar icon at the top can be used to switch back.

In date mode click on a month in the title bar will switch to year view (month picker)



and a click on year (in title bar) will switch to decade view (year picker).

## Administration

### Users

User is an entity that has access to SLP Manager

User

DESCO Admin

Name

admin@desco.com

e-mail

Owner

Active

Role

Status

Desco

Change Password

Username

Managed Departments

D1

D2

+ Add New

←

Save

Username/Password define credentials for SLP Manager login.

Role is important because it defines access rights:

- **Owner** has full access to all available functionality
- **Admin** has full access to all available functionality (except creating Admin or Owner Users)
- **Manager** has limited access (full access to managed department(s))
- **User** has only “read” access – can view but can’t modify

Setting Status to anything but Active will effectively disable user.

Even though name is not strictly required it is convenient to have it for display purposes.

e-mail is optional and used in SLP Manager mailing export (see Export section in Common functionality chapter).

Department managers will receive e-mails for every alert related to any operator from department(s) they manage.

**Required entry:** Username, Password.

## Operators

Most important SLP entities are SmartLog Pro® SE devices and operators who use them

The screenshot shows the 'Operator' form in the SLP Manager interface. The form is titled 'Operator' and has a 'Save' button in the top right corner. The form is divided into two columns. The left column contains fields for 'First' (First Name), 'e-mail', 'Operator ID', 'Contractor', 'Department', 'Group 1', 'Required test' (set to 'Wrist Only'), and 'Hours until retest required' (set to '12'). The right column contains fields for 'Test' (Last Name), 'Status' (set to 'Active'), 'Test ID', 'Shift', 'Group 2', 'ID Expiration' (set to '03/01/2022'), and a toggle for 'Only tests periodically' (which is currently turned off).

Operator ID is permanent operator identifier. It must be unique within the system and “identifies” operator to a SmartLog (either by keying in the number, scanning card or using any other available method).

Test ID is optional secondary identifier that also may be enabled to access SmartLog. SmartLog will always check entered id against all available operator IDs first. If there was no match, it will also check against all available test IDs (if this access option is enabled).

## NOTE

Even though this is not strictly required it may be a sound policy to use different “schemes” if Test IDs are used. For example, having Operator IDs as numeric sequences of 6 digits and Test IDs of 4 digits would eliminate any ambiguity and possibility for mix-up.

Even though name (first name, second name) is not strictly required it is convenient to have it for display purposes. Name shows on SmartLog display when operator is “recognized” and also on all reports, alerts and history previews. Leaving name blank will make all of them awkward.

Required test defines default test that operator should perform on SmartLog. This may be (and often is) overridden by SmartLog configuration.

Operator tests usually remain valid for some time (during which an operator isn’t required to perform a test again). The hours until retest required field defines this time period. After that time, their testing status becomes expired. Marking an operator as only tests periodically removes all recurring test constraints. The status for these operators will be periodic after the retest period expires.

If an operator has an ID Expiration date set (if it is not set, this means it does not expire) then access will be denied at the SmartLog Pro® SE if the operator attempts to use the tester on or after that date.

That operator will get an Access Denied message if they enter or scan an ID until the ID Expiration date has been updated or deleted.

**Required entry:** Operator ID.

There is additional functionality available for operators – keeping track of leave. It is accessible from operator list view (button next to history). It uses simple, standard, self-explanatory user interface and is intended for purely informational purpose.

## INFO!

Operators are synchronized with all connected SmartLog Pro® SE devices in real time. Any change to operator attributes will get propagated in matter of seconds.

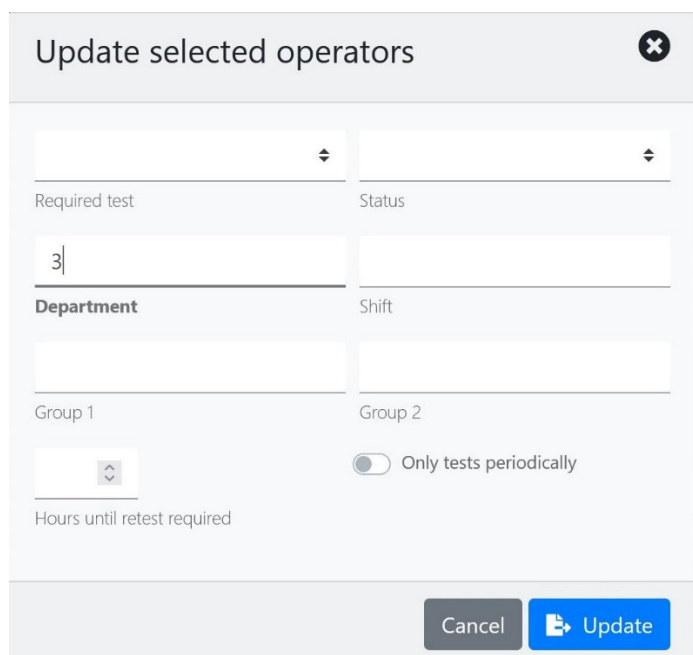
**SmartLog Pro® Manager**

**Operators** showing 1-20 of 20

Page size 20

	Name ^	ID
<input checked="" type="checkbox"/>	Test8 Eight	Operator ID: 88888 Test ID: 8
<input checked="" type="checkbox"/>	Test11 Eleven	Operator ID: 111111 Test ID: 11
<input checked="" type="checkbox"/>	Test5 Five	Operator ID: 55555 Test ID: 5
<input type="checkbox"/>	Test4 Four	Operator ID: 44444 Test ID: 4

It is possible to update the information for multiple operators in the Operator's screen by selecting them and using Update Selected (as shown in the image above).



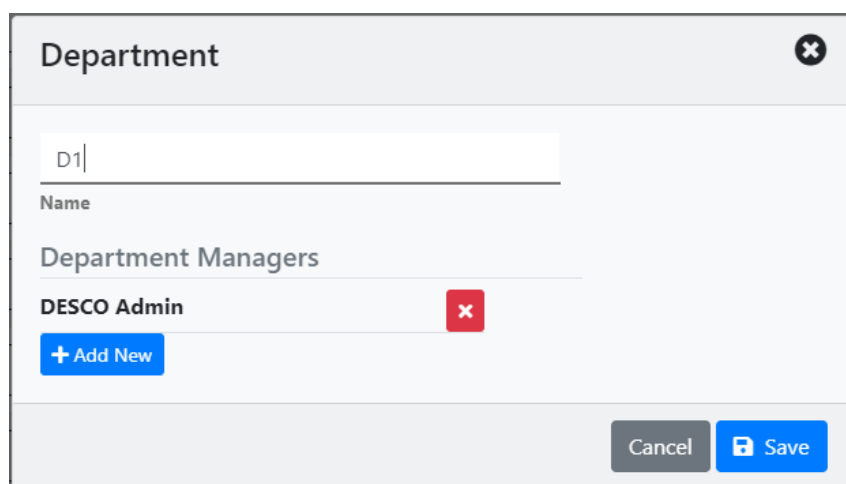
The 'Update selected operators' dialog box contains the following fields and controls:

- Required test:** A text input field with the value '3'.
- Status:** A text input field.
- Department:** A text input field.
- Shift:** A text input field.
- Group 1:** A text input field.
- Group 2:** A text input field.
- Hours until retest required:** A text input field with a dropdown arrow.
- Only tests periodically:** A toggle switch.
- Buttons:** 'Cancel' and 'Update' (with a document icon).

A window is provided with the fields available for multi-user update. Once the values are entered, use the Update button to implement the changes to all selected operators.

## Departments, Groups and Shifts

Simple entities used to organize operators. It is also possible to restrict access to a SmartLog Pro® SE device based on operator membership in any of them. User interface for managing those entities is very simple and intuitive:



The 'Department' dialog box contains the following fields and controls:

- Name:** A text input field with the value 'D1'.
- Department Managers:** A list showing 'DESCO Admin' with a red 'x' icon next to it.
- + Add New:** A blue button.
- Buttons:** 'Cancel' and 'Save' (with a document icon).



Group

Name

☒ Note 1  
☐ Note 2

Cancel

Save

Shift

Name

Start

End

Days:
☐ Su
☒ Mo
☒ Tu
☒ We
☒ Th
☒ Fr
☐ Sa

Cancel

Save

## Leave Types

Leave type is just a simple entity with name used in the operator leaves calendar.

Leave Type

Name

Cancel

Save

## Mailing Lists

Mailing list is a standard and convenient way to define a group of e-mail recipients (as explained before).

Mailing List

Test 1

Name

e-mail list:

Steve.DelToro@Desco.com

+ Add New

Cancel

Save

## Locations

Locations in SLP represent physical network locations (IP addresses) and it is possible to name them:

Location

Kristian SLP

Name

192.168.1.24

IP address

Active

Status

Cancel

Save

SLP records network location for all events (ESD tests, Access, Time clock). Naming locations results in nicer, more readable, reports and previews – for example:

Time Clock details

06/09/2020 5:05 PM

TX Test 2 (2) , TX1

Steve Test (158688612277)

Steve PC (192.168.1.85)

Clock In

### NOTE

Location Status (active/inactive) is controlled by SLP. Whenever a “live” SmartLog Pro® SE is connected its location becomes Active and Inactive otherwise.

Whenever there is active SmartLog Pro® SE device on network location “unknown” to the system (not named as Location), that IP address will show on system dashboard under **Unknown Locations** (see chapter about Dashboard below for description of this feature).

## SmartLogs

SLP Manager provides complete control over SmartLog configuration.

### INFO!

SmartLog attributes are synchronized with corresponding connected SmartLog Pro® SE device in real time. This is the main mechanism for device management in SLP.

Smart log details form is very extensive and covers every possible configuration scenario:

The screenshot shows the 'SmartLog' configuration interface. At the top, there's a header with the title 'SmartLog' and a 'Save' button. Below the header, there's a form with several sections. The first section has a text input for 'Name' with the value 'BBB'. Below that, there's a 'Serial' field with the value '158506994141' and a 'Status' dropdown menu set to 'Inactive'. There are four tabs: 'General', 'Access', 'Restrictions', and 'ESD Test'. The 'General' tab is selected. Under the 'General' tab, there's a 'Language' dropdown set to 'English', a 'Show name' toggle that is turned on, a 'Date/Time display format' dropdown set to 'ddd dd-MM-yyyy HH:mm:ss', a 'Buzzer volume' dropdown set to '1', and a 'Temperature in °F' toggle that is turned off. There's also a 'Calibration due' field with a calendar icon. Below that, there's a 'Timeouts (seconds):' section with four dropdowns: 'Admin' (60), 'ESD Test' (10), 'Show ESD result' (3), and 'Relay duration' (1). At the bottom, there's an 'Operation Mode' dropdown set to 'ESD Test'.

Serial number is permanent unique device identifier. Each SmartLog Pro® SE already has serial number which has to be used in SLP Manager.

### NOTE

Every connected SmartLog Pro® SE will communicate with SLP and “reveal” its presence. If it doesn’t exist yet in the system, it will show (with serial number) in **Unknown Devices** on the SLP Manager dashboard. (See the **Dashboard** section below for more details).

Recommended way of adding devices to the system is to use this “plug and play” feature:

- connect SmartLog Pro® SE to the network and configure it to communicate with SLPConfig
- use Unknown Devices on the Dashboard to attach it to the system
- give it descriptive name

Name isn’t strictly required but it will show on all reports, alarms and previews.

It isn’t necessary to set all other attributes right away (defaults are most commonly used settings)

– this can be left for later fine-tuning step.

Status (Active/Inactive) is controlled by SLP automatically. Whenever device is connected it will be Active and it is Inactive otherwise.

General tab contains attributes that determine visual aspects of client software on SmartLog Pro® SE device and also define operation mode (ESD test, Access control or Time clock).

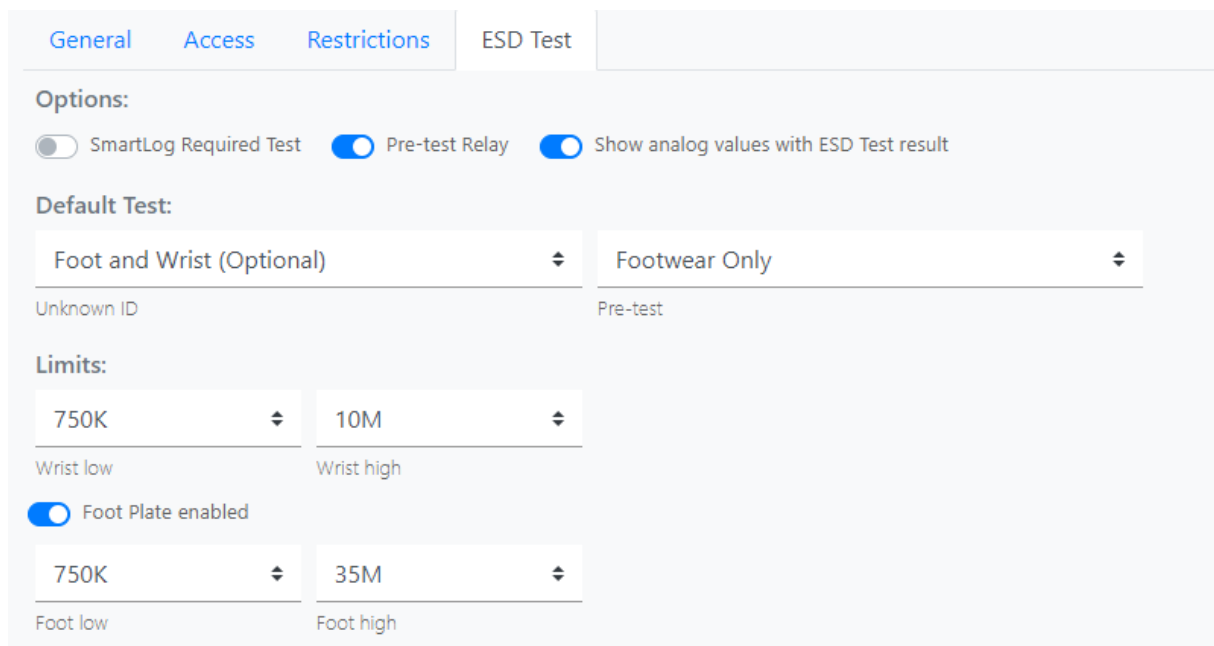
Access tab defines available access methods and login options:

The screenshot shows the 'Access' tab in a software interface. At the top, there are four tabs: 'General', 'Access', 'Restrictions', and 'ESD Test'. The 'Access' tab is selected. Below the tabs, the section 'Input enabled:' contains three toggle switches, all of which are turned on: 'Keypad', 'Barcode Reader', and 'Proximity Reader'. Below these are two input fields: 'Admin keypad code' and 'Admin barcode'. The next section is 'Login allowed:', which contains four toggle switches: 'Operator ID' (on), 'Test ID' (off), 'Unknown ID' (on), and 'Pre-test' (on). Below these is a dropdown menu currently set to 'Unknown ID' with a small upward and downward arrow icon. At the bottom of this section is the label 'Unknown ID display'.

And on Restrictions tab it is possible to define various restrictions that limit access to device: department, group or shift membership and restricting access only to certain time periods.

The screenshot shows the 'Restrictions' tab in the same software interface. The tabs at the top are 'General', 'Access', 'Restrictions', and 'ESD Test', with 'Restrictions' now selected. The section 'Allow access only for members of:' contains four input fields arranged in a 2x2 grid: 'Department', 'Shifts', 'Group 1', and 'Group 2'. Below these fields is the section 'Hours of operation:', which features two time input fields. The first field is labeled 'Begin' and contains '08:00'. The second field is labeled 'End' and contains '16:00'. Between these two fields are two circular icons with clock faces. To the right of the 'End' field is a red square button with a white 'X' icon. At the bottom left of the 'Hours of operation:' section is a blue button with a white plus sign and the text '+ Add New'.

Finally, ESD Test tab defines ESD test parameters



**Options:**

☐ SmartLog Required Test ☒ Pre-test Relay ☒ Show analog values with ESD Test result

**Default Test:**

Foot and Wrist (Optional) Footwear Only

Unknown ID Pre-test

**Limits:**

750K 10M

Wrist low Wrist high

☒ Foot Plate enabled

750K 35M

Foot low Foot high

- limits for PASS/FAIL
- default test for device
- default test override with operator's default test

### Cloning configuration

It is quite common that several SmartLog Pro® SE devices within organization share same (or almost same) configuration. As mentioned before, when new device is created in SLP Manager it will get sensible factory defaults for configuration. But, when desired configuration differs from this default for large number of devices, it may be tedious to configure them one by one if many of those configurations are the same.

To help streamline this process SLP Manager implements “configuration cloning”. This is in fact simple and common copy/paste mechanism applied to configurations.

SmartLog Pro® SE details page contains two extra buttons (copy and paste configuration) – see screenshot. Copy and paste operations work as expected:

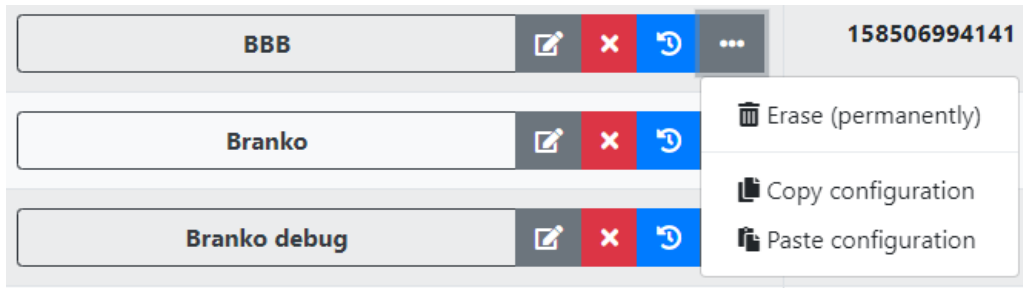
- copy copies configuration into memory (browser) buffer
- paste applies stored configuration to current device

Note that paste button won't be available unless stored (copied) configuration exists.

#### INFO!

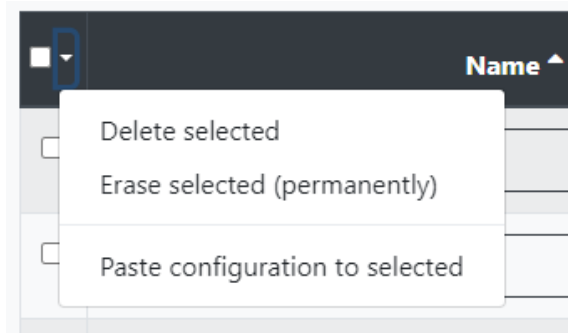
Copy/paste doesn't use standard clipboard. Copied configuration is stored in browser local storage instead. This implicates that stored configuration will be available even after browser is closed and opened again sometimes.

Cloning mechanics is even more useful on SmartLogs list view. Every item has extra button with additional commands:



which can be utilized to copy configuration (and to paste stored configuration to that device).

Finally, on selected commands dropdown in title bar:



there is a command that “clones” stored configuration to all selected devices. This feature makes setting same configuration to many devices really quick and simple – configure first device, copy configuration, select others and paste stored configuration.

## Dashboard

System Dashboard (SLP Manager “home” screen) is always accessible by clicking on title in the top of the left sidebar. It is composed of widgets that give information about the system and is refreshed in real time:

The dashboard contains several widgets:

- Recent ESD tests:** A table showing test results for operators like Roberto's SmartLog, Victor Arellano, and Kristian Aćkar.
- Unknown SmartLogs:** A section for tracking unknown SmartLog entries with an attach button.
- Unknown Locations:** A section for tracking unknown locations with an attach button.
- Failed ESD tests:** A table showing failed tests within a specified time range.
- SmartLogs with high FAIL rate:** A table showing SmartLogs with high failure rates.
- Operator last known ESD status:** A table showing the last known ESD status for operators.
- Operators with high FAIL rate:** A table showing operators with high failure rates.

Most of the widgets are reports giving insight into important aspects of system operation. It is possible to configure their parameters (or even remove them from the dashboard) using Options (see section below). It is also possible to adjust some settings directly using provided controls, but those changes are not persisted (unlike ones set in Options).

### NOTE

The Operator last known ESD status widget displays various results which are summarized below. You may view the detailed status entry results by clicking on each line.

**Expired** – The operator’s test expired based on the “hours until retest required” setting in the Operator screen. A retest is required.

**Fail** – The operator’s last test was failed.

**Leave** - The operator is currently scheduled on leave. Leave may be scheduled in the Operator screen.

**No Test** - The operator received a “No Test” result at the tester due to not completing a test in time.

**Pass** – The operator’s last test was passed.

**Periodic** - The operator’s test expired based on the “hours until retest required” setting in the Operator screen; however, they are designated as a person that only tests periodically.

Two widgets have a different yet very important role – Unknown Locations and Unknown SmartLogs. It was already described before in sections describing Location and SmartLog entity respectively how they are identified to the system. Whenever new (not stored yet) to the system location or device appears it will show on the dashboard. Recommended way to add them is clicking on **Attach** button. This will bring up simple popup form like:

Attach SmartLog

×

Create new SmartLog

Name

Cancel

Attach

where only name is required. For locations it completes creation process and it only names SmartLog – it will get default configuration which could/should be fine-tuned as described before in related section.

## Reports

Reports are full-featured list views that only show specific information. They include standard filtering, sorting and pagination as well as export functionality (see common features description in related chapter).

Two reports are summaries and provide statistical information (averages) about performance organized by operators or devices.

Three other reports give (filtered) list of events – tests, accesses and clock respectively. ESD Test history has special feature added.

ESD Test history

Export PDF

showing 1-20 of 31

<<

<

1

2

>

>>

Page size

20

Time	Operator	Department	SmartLog	Hum	Temp	Test Type	Result	Wrist	Left	Right
08/26/2020 7:02 AM	TX Test 1	TX1	(159840298394)	58%	44°C	Foot and Wrist (Optional)	Pass	W1: 2.0M W2: 4.0M	4.4M	7.3M
08/26/2020 7:02 AM	TX Test 1	TX1	(159840298394)	58%	41°C	Foot and Wrist (Optional)	No test			
07/28/2020 11:14 AM	Test77		Roberto's SmartLog	0%		Wrist Only	No test			
07/24/2020 7:31 PM	Test77		Roberto's SmartLog	85%	33°C	Foot and Wrist (Optional)	Fail	W1: 12G	6.0K	5.0K
07/08/2020 4:42 PM	TX Test 1	TX1	Steve Test	79%	29°C	Foot and Wrist (Optional)	Pass	W1: 550K W2: 40M	413M	591M
07/07/2020 7:50 PM	TX Test 1	TX1	Steve Test	21%	-8°C	Foot and Wrist (Optional)	Pass	W1: 11M W2: 26M	373M	396M
07/07/2020 7:42 PM	TX Test 1	TX1	Steve Test	13%	-4°C	Foot and Wrist (Optional)	Pass	W1: 1.0M W2: 20M	341M	233M
07/07/2020 7:41 PM	TX Test 1	TX1	Steve Test	9%	-11°C	Foot and Wrist (Optional)	Pass	W1: 19M W2: 12M	14M	703M
07/07/2020 5:56 PM	TX Test 1	TX1	Steve Test	81%	38°C	Foot and Wrist (Optional)	Pass		154M	775M
07/07/2020 5:55 PM	TX Test 1	TX1	Steve Test	77%	36°C	Foot and Wrist (Optional)	Fail	W1: 25M W2: 8.7M	172M	1.2G
06/23/2020 8:39 PM	TX Test 1	TX1	Steve Test	98%	30°C	Foot and Wrist (Optional)	Pass		99M	313M
06/23/2020 8:38 PM	TX Test 1	TX1	Steve Test	94%	27°C	Foot and Wrist (Optional)	Pass	W1: 26M W2: 13M	588M	153M
06/23/2020 7:48 PM	TX Test 1	TX1	Steve Test	86%	13°C	Foot and Wrist (Optional)	Pass	W1: 4.8M W2: 22M	857M	893M
06/23/2020 7:45 PM	TX Test 1	TX1	Steve Test	77%	-23°C	Foot and Wrist (Optional)	Pass	W1: 7.5M W2: 11M	908M	619M
06/16/2020 7:48 PM	TX Test 1	TX1	Steve Test	70%	30°C	Foot and Wrist (Optional)	Fail	W1: 42M W2: 2.5M	59M	281M

It is possible to enter and review notes for every failed test (see little note icon next to Fail result):



Notes for event

Note

Cancel

Save

All history reports also have standard preview capability (clicking on event row):

ESD Test details

🕒 08/26/2020 7:02 AM

👤 TX Test 1 (1111) , TX1

📄 (159840298394)

📍 (192.168.2.105)

💧 58%

🌡️ 44°C

Foot and Wrist (Optional)

Pass

Wrist:

Pass W1: 2.0M W2: 2.0M

Left Foot:

Pass 4.4M

Right Foot:

Pass 7.3M

## Alerts

Alerts are similar to reports – they are standard list views with standard filtering, sorting, pagination and export and they report information about events that may require immediate attention.

Unlike reports they are “live”, meaning that they refresh in real time.

Following alert reports are available:

- **Clock IN** shows a list of operators that haven’t passed ESD test after clocking in within defined period of time
- **Retest** shows a list of operators that haven’t passed ESD test after failed ESD test within defined period of time
- **High Fail** shows a list of operators that have large number of consecutive failed ESD tests (greater then defined threshold)

All alerts are also e-mailed by SLP Backend as they occur. Department managers will automatically receive e-mail for every alert for any of their operators.



## Import Operators

One of the common tasks in setting up SLP system is creating (entering) operators. SLP Manager has **Import Operators** feature (under **Tools** menu) that can greatly speed up this process. Import has some advanced features and it is also possible to use it for some other tasks like bulk update of existing operators (for example to change department or default test for a group of operators at once).

First step in import process is selecting input file:

### Import Operators

Data Source

Select  

☒ First row contains field names

Most common tabular data sources (excel, text files, comma or tab separated files) are supported and it is also possible to specify whether first row contains column names or not.

When file is selected full preview of contained data is shown on the Preview tab:

PreviewOptionsImport

FirstName	SecondName	eMail	CardId	OperatorId	Department	Shift	Note1	Note2
Mirko			1234		A			
Kristian	Ačkar	kristian.ackar@gmail.com	12345		D4			
Victor	Arellano	Victor.Arellano@Desco.com	413		A			
Jeffry	Brake	Jeffry.Brake@Desco.com	205		A		B	
Todd	Brake	Todd.Brake@Desco.com	312		B	A	A	
Steve	Del Toro	Steve.DelToro@Desco.com	669	10502	TX1	A	A	B
Roberto	Garayo		445			A		B
Gregg	Heckler	Gregg.Heckler@Desco.com	289		B	A		
Paul	Rosas	Paul.Rosas@Desco.com	418					
Reyes	Sanchez	Reyes.Sanchez@Desco.com	10528					
Branko	Špiljak	branko.spiljak@gmail.com	781523	0001	D1	First	Lurker	Macro
Matija	Špiljak		666		D2			

(in example above first row contained column names).

Data preview is quite useful especially in cases when column names were not specified in the first row. It also helps in column mapping definition that will be explained below. It is always possible to switch between tabs. In fact, it will often happen that switching between Options and Preview is used to determine proper column mapping or simply to doublecheck everything before triggering import.

**NOTE**

If you will be importing information for the **Status**, **Required Test** or **Periodic** fields in your file please note that the program uses numeric codes for those. You will need to use the numeric entries below to designate the various available options for those fields.

**Status**

Active = 0

Inactive = 1

Deleted = 2

Blocked = 3

**Required Test**

No Test Required = 0

Wrist Only = 1

Footwear Only = 2

Foot and Wrist = 3

Foot or Wrist = 4

Foot and Wrist (Optional) = 5

Smock Only = 6

Foot and Smock = 7

Foot and Smock (Optional) = 8

User Choice = 10

**Periodic**

False = 0

True = 1

Next step in import procedure is defining column mappings and default values. This is done on Options tab:

The screenshot shows the 'Options' tab in the SLP Manager interface. It is divided into two main sections: 'Columns' and 'Defaults'.

**Columns Section:** A table with two columns: 'Column' and 'Import to'. It lists 12 columns. Columns 1-2 are mapped to 'First Name' and 'Second Name'. Columns 3-12 are currently set to '--- not imported ---'. A dropdown menu is open for Column 3, showing a list of fields: Operator ID, Test ID, First Name, Second Name, e-mail, Department, Shift, Group 1, Group 2, Required test, Test Valid, Periodic, and Status.

**Defaults Section:** Contains settings for applying defaults. At the top, there are two radio buttons: 'Apply always' (unselected) and 'Apply only if missing' (selected). Below this are several fields, each with a checkbox to its left: 'Active' (checked), 'Department' (unchecked), 'Shift' (unchecked), 'Group 1' (unchecked), 'Group 2' (unchecked), 'Foot and Wrist (Optional)' (checked), 'Required test' (unchecked), '4' (checked, with a text input field next to it), and 'Hours until retest required' (checked, with a toggle switch labeled 'Only tests periodically').

Example above shows a case when first row didn't contain field names. In this case columns will be named Column1, Column2, etc.

If first row contained field names, SLP Manager will try to figure out best column mapping. For example, if column was named "name" it will be mapped to First Name field. It is important to note that this matching is not perfect and it won't be able to match some columns or match some columns to wrong fields. It is always advisable to check matching carefully and add missing mappings manually, correct wrong ones and/or remove mappings for columns that should not get imported.

It is often case that some rows do not have values for standard columns. It is possible to define defaults in those situations.

#### IMPORTANT!

By default, only Status, Default test, Retest period and Periodic tester fields are marked for applying defaults. In order to apply also, for example, Department you should enter value for department but **also turn on** checkmark next to it. Only defaults that are checked will get applied.

Applying defaults is primary intended for filling in missing values but it is also possible to apply defaults always (to all imported operators). This feature is particularly useful when changing attribute of a group of existing operators.

For example, to change default test for all (or some) operators you should first perform export on operators list view as described before and then import this file while using default for Default test (new desired value) and applying to all.

Last step is import itself but before that SLP Manager offers one last check – import preparation. It is done on Import tab by clicking on **Prepare** button:

The screenshot shows the 'Import' tab with three buttons: 'Preview', 'Options', and 'Import'. Below these are three toggle switches: 'Create new Operators' (checked), 'Update existing Operators' (checked), and 'Create/Update selected only' (unchecked). A red error message box states: 'Operator ID field is required! Use Options tab to select related source column.' A 'Prepare' button is visible on the right.

If there were any errors that are critical for import SLP Manager will show appropriate error message like in example above. Critical errors have to be corrected in order to proceed. Situations like that are solved by switching back to Options and adjusting mappings then clicking Prepare again. Import data is held in memory and it is therefore possible to switch between tabs as often as necessary.

Finally, when all critical errors are corrected, Prepare will show how imported data will look like:

The screenshot shows the 'Import' tab with three buttons: 'Preview', 'Options', and 'Import'. Below these are three toggle switches: 'Create new Operators' (checked), 'Update existing Operators' (checked), and 'Create/Update selected only' (checked). A 'Prepare' button and an 'Import' button are visible on the right. Below the buttons is a table titled 'CREATE'.

	Name	ID	e-mail	Department	Shift	Note 1	Note 2	Status	Required test	Test Valid	Periodic	ID Expiration
<input type="checkbox"/>	Contractor Test 132	Operator ID: 132	✉ 101@101.com	Contractor				Active	Foot and Wrist (Optional)	24	✗	
<input type="checkbox"/>	Contractor Test 119	Operator ID: 119		Contractor				Active	Foot and Wrist (Optional)	6	✗	

It will also be possible to import only subset (selected) of input data if Create/Update selected only option was selected.

If both Create new Operators and Update existing Operators were selected this final preview will show operators to be created and operators to be updated in separate tables.

Prepare is important as a last check because import can't be undone once started. It is advisable to check whether columns were properly matched, all fields have meaningful values, etc. If something is wrong, it is always possible to switch to options, change things and run Prepare again until everything is correct.

## Automatic Operators Import

SLP Manager has an **Automatic Operators Import** feature (under **Tools** menu) that allows the automatic import of operators from a file.

For this feature to function you will need to create and specify a **Data Folder** where the import file with the operator data will be placed and a **Backup Folder** where a copy of the automatically imported file will be backed up under a name that includes the date and time of the import.

Most common tabular data sources (excel, text files, comma or tab separated files) are supported. It is also possible to specify whether first row contains column names or not in the Data tab.

Options Data History

☒ Active

C:\Operator Import\Data

Data folder

C:\Operator Import\Data\Backup

Backup folder

☒ Create new Operators

☒ Update existing Operators

☒ Create unmatched Departments, Shifts and Groups

Several options are available that let you specify if you want to just create new operators, update existing ones and create unmatched data.

Once the option is set to **Active**, any data file you place in the **Data folder** will be imported into the program within a few seconds.

How the file is imported will be determined by how the fields are defined in the Data tab based on your selected **Sample** file. It is important to define column mappings and default values in this tab. You may open the regular Import Operators section in a separate browser window or tab to test your data file using its Preview tab prior to finalizing your settings in this tab.

Options Data History

Columns

Sample

☒ First row contains field names

Column	Import to
Test ID	Test ID
First Name	Operator ID
Last Name	Test ID
e-mail	First Name
Operator ID	Last Name
Department	e-mail
Test Valid	Department
Periodic	Shift
	Group 1
	Group 2
	Required test
	Test Valid
	Periodic
	Status

Defaults

☐ Apply always ☒ Apply only if missing

☒ Active

Department

Shift

Group 1

Group 2

☒ Foot and Wrist (Optional)

Required test

☒ 4

Hours until retest required

☒ Only tests periodically

If first row contained field names, SLP Manager will try to figure out best column mapping. For example, if column was named “name” it will be mapped to First Name field. It is important to note that this matching is not perfect, and it won’t be able to match some columns or match some columns to wrong fields. It is always advisable to check matching carefully and add missing mappings manually, correct wrong ones and/or remove mappings for columns that should not get imported.

It is often case that some rows do not have values for standard columns. It is possible to define defaults in those situations.

**IMPORTANT!**

By default, only Status, Default test, Retest period and Periodic tester fields are marked for applying defaults. In order to apply also, for example, Department you should enter value for department but **also turn on** checkmark next to it. Only defaults that are checked will get applied.

Applying defaults is primary intended for filling in missing values but it is also possible to apply defaults always (to all imported operators).

OptionsDataHistory

Import history

showing 1-7 of 7

Page size20

Import time	Import file	Created	Updated	Failed	Error
05/03/2021 4:45 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\hort Example - Copy.xlsx	0	2	0	
05/03/2021 4:44 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\20210426135831-Operators Short Example.xlsx	0	2	0	
05/03/2021 4:43 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\20210426135831-Operators Short Example.xlsx	0	2	0	
04/26/2021 1:58 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\Operators Short Example.xlsx	2	0	0	
04/26/2021 1:55 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\Operators Short Example.xlsx	0	0	0	Object reference not set to an instance of an object.
04/23/2021 1:52 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\Operators Short Example.xlsx	2	0	1	row 1: Input string was not in a correct format.
04/23/2021 1:46 PM	C:\DESCO EMIT\SMARTLOG PRO SE and MANAGER\Automatic Operators Import\Operators Short Example.xlsx	2	0	1	row 1: Input string was not in a correct format.

Page size20

If there were any errors during the automatic import, SLP Manager will show appropriate error messages in the History tab as shown above. Errors must be corrected in order to properly import future files. Errors are solved by switching back to Options or Data tabs and adjusting mappings or settings or modifying your data file with the operator information.

You may then test the automatic import again by simply placing a new operator data file in the **Data folder** and checking the History tab for the results after a few seconds.

## Options

SLP Manager provides control over certain system options. It is possible to set and change some display aspects of SLP Manager itself but also control operation of some backend features.

### IMPORTANT!

All changes made on Options page have to be saved explicitly!

Settings related to SLP Manager are grouped on **Display** tab:

System Options

Save

Display
Operational
Report Schedule

General

20

☐ Temperature in °F

Page size for Admin lists:

Landing page widgets

	Page size	Refresh (seconds)	Within last (hours)
<input checked="" type="checkbox"/> Recent ESD tests	10	10	
<input checked="" type="checkbox"/> Operator last known ESD status	10	10	
<input checked="" type="checkbox"/> Failed ESD tests	20	15	12
<input checked="" type="checkbox"/> SmartLogs with high FAIL rate	20	15	12
<input checked="" type="checkbox"/> Operators with high FAIL rate	20	15	12

Alerts

	Page size	Refresh (seconds)
No ESD Test after Clock IN	20	15
No ESD PASS after FAIL	20	15
High ESD FAIL count	20	15

Here it is possible to control:

- temperature units (Celsius or Fahrenheit)
- page size (number of rows) on all list views under Administration section
- aspects of landing page widgets (page size, live refresh period and period for widgets showing failures)
- turn landing page widgets on/off
- control aspects of alert views (page size and live refresh period)

**Operational** tab contains settings that control backend operation:

Display
Operational
Report Schedule

Alerts

Set to 0 to disable alert

10

No ESD Test after Clock IN (minutes)

30

No ESD PASS after FAIL (minutes)

10

High ESD FAIL count (# Fails)

Database

6

Purge events older then (months) (set to 0 to keep events forever)

Mail Server (SMTP)

Leave Server blank to disable

smtp.sendgrid.net

Server

587

Port

☒ Use SSL

apikey

Username

SLP@descoindustries.com

Password

SLP@descoindustries.com

Sender

SLP Backend may send e-mails to department managers (alerts), selected admins (reports) and on demand from various views (as explained before). To make mailing functionality available, SLP uses SMTP mail server. All required parameters for SMTP server are available on this tab. This is advanced feature normally performed by network/system administrators.

SLP maintains system database to store data. It is accessed directly only by SLP backend internally and data services are available by api layer to clients. Even though expected database growth over time won't be a problem in most cases, it may happen in large systems with many connected SmartLog Pro® SE devices that it accumulates millions or even billions of ESD tests over time. SLP has



opt in safeguard against this situation. It is possible to set on this tab a period in months to keep events stored (ESD tests, Accesses, Clock events). All events older then set period will get purged from the database automatically. This happens in the backend silently and cannot be undone.

Finally, it is also possible to control alerts here. Configuration is simple and consists of setting “key period” for each alert. It is also possible to completely disable certain alerts here.

**Report Schedule** tab maintains schedule for sending automated reports from SLP backend (this is basically the Operator ESD Status from the main window in report form; not every single ESD test is shown):

New Report Schedule

Report

Filter

Columns

Name

Active

Time

Days:

☒ Su

☒ Mo

☒ Tu

☒ We

☒ Th

☒ Fr

☒ Sa

Mailing Lists

Additional e-mails

Archive location (folder)

Formats:

☒ Text

☒ Excel

☒ HTML

Cancel

Save

## NOTE

Active scheduled reports are “once per day” only. Meaning that if the report was already processed (created, stored, sent) today it will not be sent out again regardless of any modifications to the report (modifying the time, e-mails, etc.). Any changes made will be applied the next time it is scheduled to run. There is an **Execute** button in the listing of reports which allows you to repeat sending/running the report on the same day if you need to.

This tab contains standard list view to display/filter schedules and creating/editing schedules is self-explanatory. A report may be enabled/disabled via the **Active** option.

A report may be filtered by Department, Shift, Groups, Location, SmartLog or Result via the Filter tab.

SLP implements sending (HTML) reports by mail. It is possible to select one or more mailing lists but it is also possible to add extra emails in the form above. Additional e-mails can contain multiple e-mail addresses separated by commas, semicolons, or spaces.

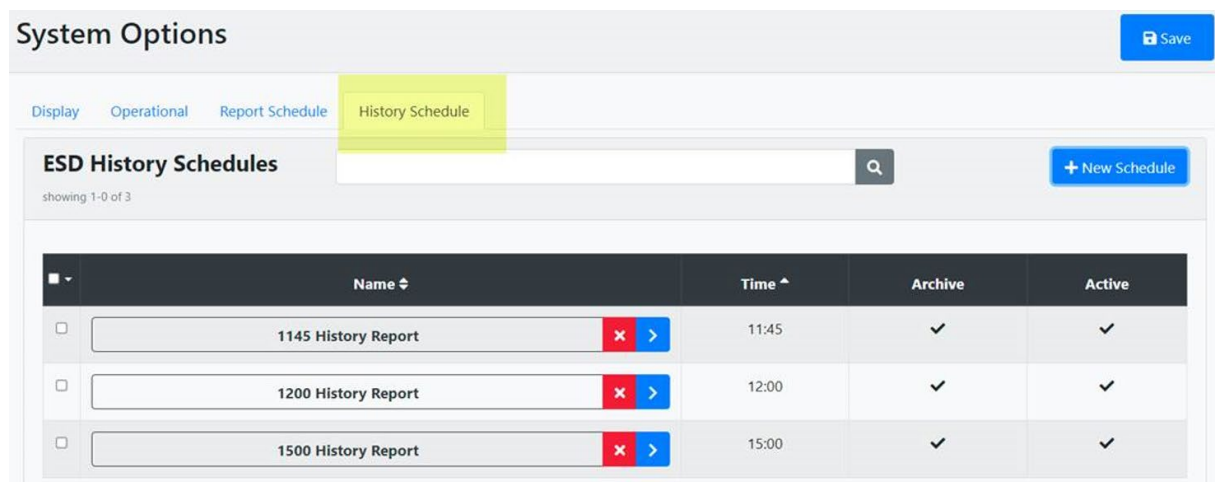
It is also possible to store reports as files on the local computer by specifying **Archive location** in the form above. Archive locations have to be entered as FULL paths. Valid examples are:  
*C:/Desco/Reports/Archive* or *D:\SLP Reports\*.

Report creation is handled by SLP Backend. If archive folder doesn't exist backend will create it. Stored reports come in three formats:

- TXT – tab delimited text file containing report data (suitable for import)
- EXCEL – Excel file containing report data (suitable for import)
- HTML – similar to report sent by email

This feature is also quite flexible. It is possible to create several reports (even triggered at same time) that perform different tasks. Some may send emails, some may archive reports for later review or use, some may do both.

**History Schedule** tab has an ESD History report that exports all captured ESD logs for a given time period.



System Options					Save
Display	Operational	Report Schedule	History Schedule		
ESD History Schedules			Q	+ New Schedule	
showing 1-0 of 3					
	Name	Time	Archive	Active	
<input type="checkbox"/>	1145 History Report	11:45	✓	✓	
<input type="checkbox"/>	1200 History Report	12:00	✓	✓	
<input type="checkbox"/>	1500 History Report	15:00	✓	✓	

In the example image above, the first report at 11:45 would capture all ESD transactions from midnight up to the time the report was sent. The second report 12:00 would provide results from when the last report was sent up to when this report is sent (11:45-12:00). If you wish to capture all logs for the day, you may create one report with a time of 23:59.

The screenshot shows the 'System Options' application with the 'History Schedule' tab selected. A modal window titled 'New ESD History Schedule' is displayed. The modal has two tabs: 'Report' (selected) and 'Columns'. It contains the following fields and controls:

- Name:** A text input field.
- Active:** A toggle switch currently turned on.
- Time:** A text input field.
- Archive location (folder):** A text input field for specifying the full path.
- Formats:** Checkboxes for 'Text' and 'Excel', both of which are checked.
- Buttons:** 'Cancel' and 'Save' buttons at the bottom right.

A report may be enabled/disabled via the **Active** option.

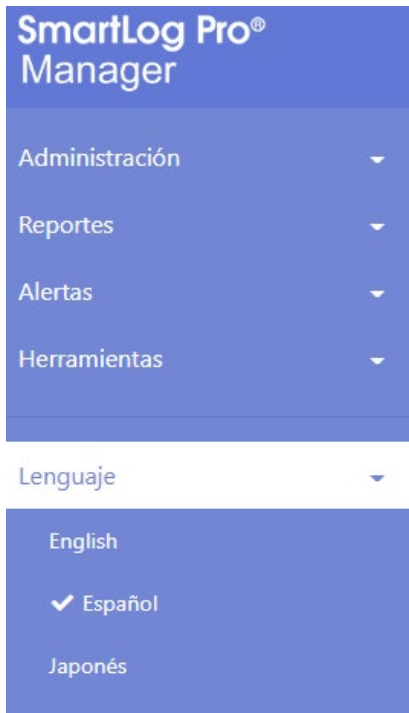
Store reports as files on the local computer by specifying **Archive location** in the form above. Archive locations have to be entered as FULL paths. Valid examples are: *C:/Desco/Reports/Archive* or *D:\SLP Reports\*.

Report creation is handled by SLP Backend. If archive folder doesn't exist backend will create it. Stored reports come in two formats:

- **TXT** – tab delimited text file containing report data (suitable for import)
- **EXCEL** – Excel file containing report data (suitable for import)

## Changing language

SLP Manager is translated and available in several languages. Language selection is done from the sidebar:



## Software activation

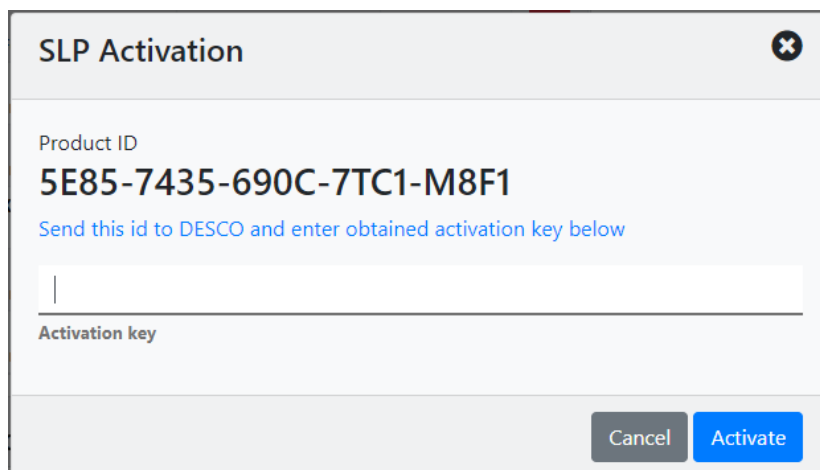
SLP requires valid license to operate. Upon installation, SLP will run with trial license and validity is shown on the sidebar:



### IMPORTANT!

License is related to SLP backend even though it is shown on and maintained by SLP Manager. If license expires whole SLP will stop working.

To activate SLP software click on **Activate** button (see above image):



**SLP Activation**

Product ID  
**5E85-7435-690C-7TC1-M8F1**

Send this id to DESCO and enter obtained activation key below

Activation key

Cancel Activate

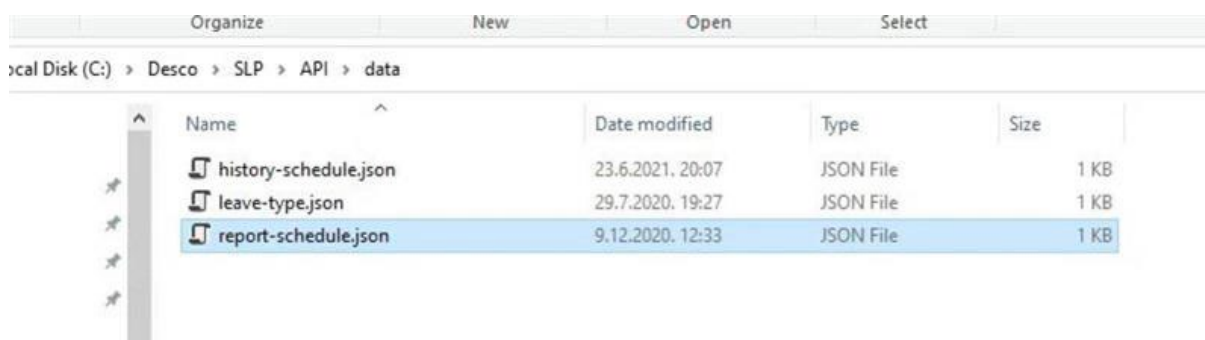
This form contains unique Product ID. Send this ID to your EMIT representative and obtain activation key. Enter activation key in respective field and click **Activate**.

If entered activation key was valid, SLP will be activated permanently.

It is also possible to obtain extended trial key from EMIT but it will only be valid for limited period of time. Contact your EMIT representative for further details.

## Moving the Software

If you wish to move the software to a new computer, you may follow the installation instructions in this guide to install the program on the new PC or Server. It is recommended that you copy the current **slp.sdf** file (by default located in the **C:/Desco/SLP/data** folder) to the new Data folder, so you may continue with your existing data. There are also some **.json** files in the default folder **C:/Desco/SLP/Api/data** shown in the image below that contain settings related to their file names. These may also be copied over, so you don't lose those settings.



Name	Date modified	Type	Size
history-schedule.json	23.6.2021, 20:07	JSON File	1 KB
leave-type.json	29.7.2020, 19:27	JSON File	1 KB
report-schedule.json	9.12.2020, 12:33	JSON File	1 KB

Please note that you should stop the SmartLog Pro® (SLP) Manager web site in IIS on the old computer so that tests completed on the SmartLog Pro® SE units remain in memory until you begin communicating with the new installation. You will need to restart the SLP Manager site in IIS on the new computer and refresh the program's webpage in your web browser for the file data copying changes to take effect.

You will also need to make sure that you run the Connected Devices Configuration as detailed in the installation procedure to configure your SmartLog Pro® SE devices to "talk" to the SLP Backend of the new installation.

It is recommended that you uninstall the SmartLog Pro® (SLP) Manager software on the previous computer once you have the installation functioning on the new PC or Server.