Contents

Introduction

Service Desk Optimiser (SdO) is a networked application that improves and extends a Service Desk's capabilities and services to make even better use of an already invaluable resource. For further information about Service Desk Optimiser please follow this link: http://servicedeskoptimiser.com/

SdO Server Prerequisites Installation and SdO Server Installation

SdO Installation Recommendations

The following recommendations are intended to facilitate the smooth installation and use of the SdO system:

- Dedicate a system, either real or virtual, to become a SdO server (pre-requisites below)
- Set the network name of the dedicated system to "SdOServer" which is SdO's default server name i.e. so that agents know where to send their data
- For LAN installations (where the SdO server and agents reside on the same LAN) and SSL/HTTPS deployment is not required, the default SdOServer name can be configured during the setup process.
- For WAN installations a public domain name (and fixed IP address) for the SdO server will need to registered and the respective SSL/HTTPS security certificate and key files obtained. The domain name, certificate file and key file are installed during the setup process.
- Reboot the SdO server after the installation process has completed.

SdO Hardware and Software Prerequisites

SdO Agent

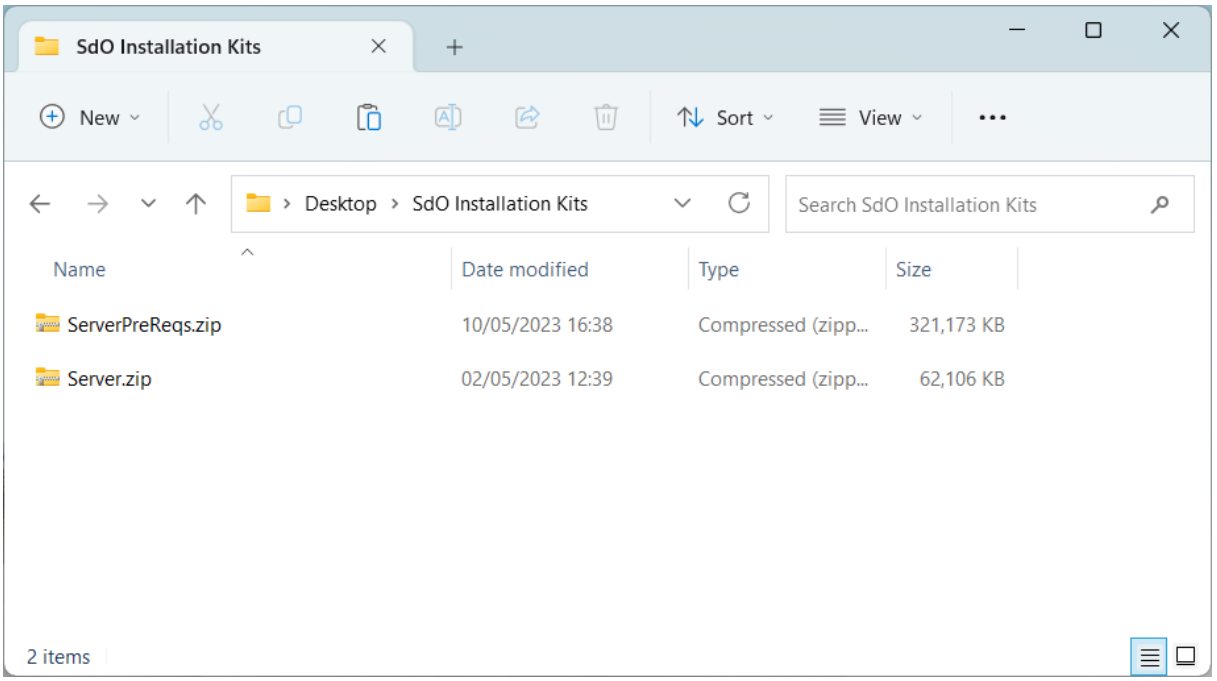
- Software
  - Windows 10 Pro
  - Windows Server 2019 (VDI, Remote Desktop, etc)
  - Windows 11 Pro
  - Windows Server 2022 (VDI, Remote Desktop, etc)
  - (actually, Windows 7 onwards, but not Home editions)
- Hardware
  - WAN or LAN networks of any viable hardware platforms, physical or virtual, that supports the software platforms above.

SdO Server

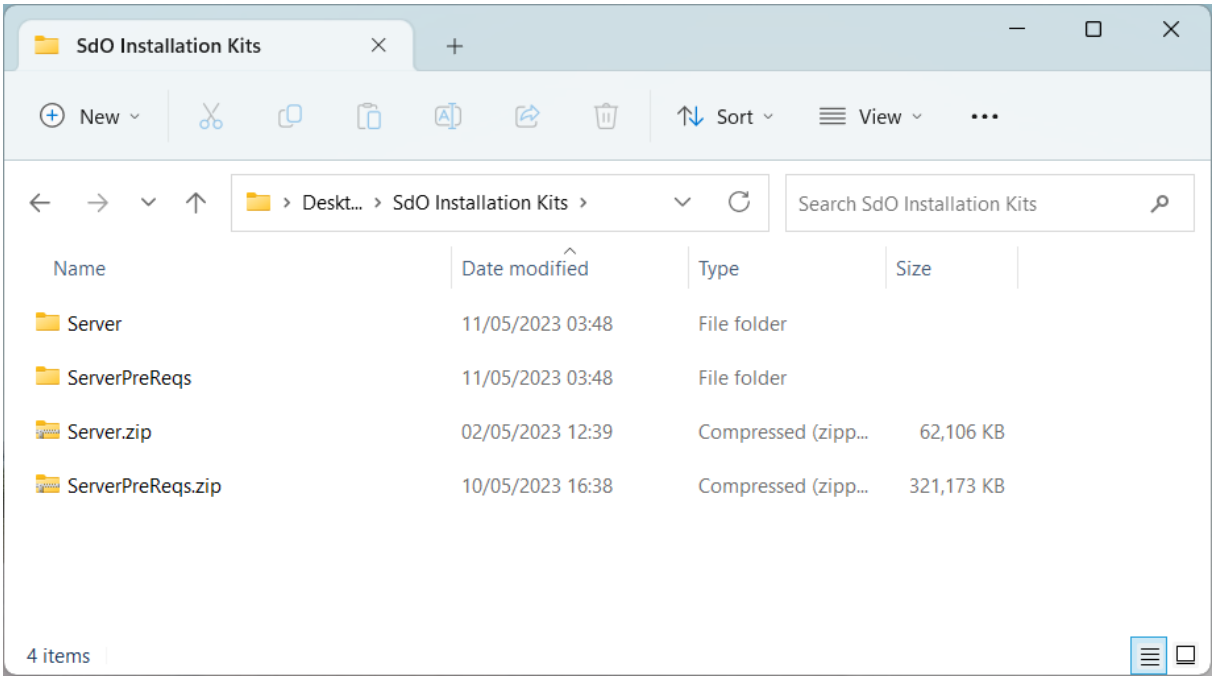
- Software
  - Windows 10 Pro (for SdO evaluation purposes)
  - Windows Server 2019
  - Windows 11 Pro (for SdO evaluation purposes)
  - Windows Server 2022
  - Microsoft C++ Runtime Libraries
  - ProgreSQL 14 Database
  - UnuGUI Runtime
- Hardware
  - For evaluation purposes
    - 2 CPUs
    - 6GB RAM
    - 10GB Disk
  - For deployment for up to approx. 1000 desktops
    - 8 CPUs (min 3GHz)
    - 32GB RAM
    - 2TB Disk RAID 1-0 (typical volumes 500KB/Desktop/Day)
      - SSD drives recommended for performance
      - RAID is recommended for resilience
      - 90 days to 365 days data retention suggested if data volume is to be limited

SdO Pre-requisites Installation

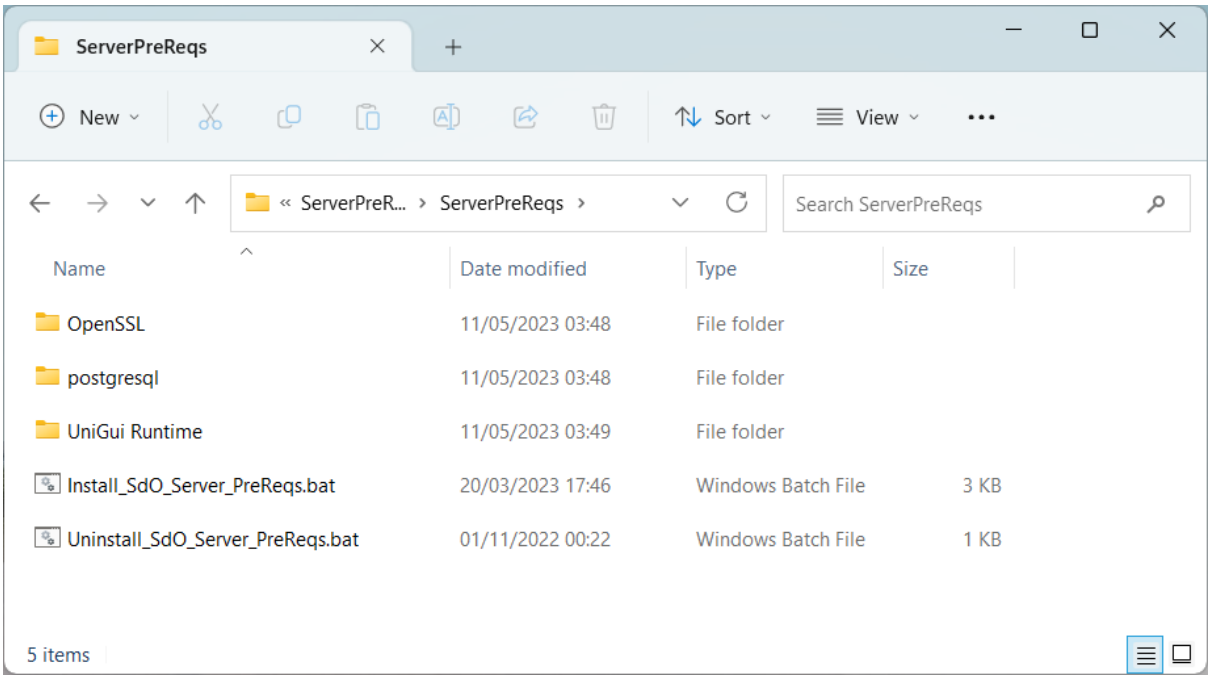
To start installation, copy the SdO Server and SdO Server Prerequisite zip files to a folder:



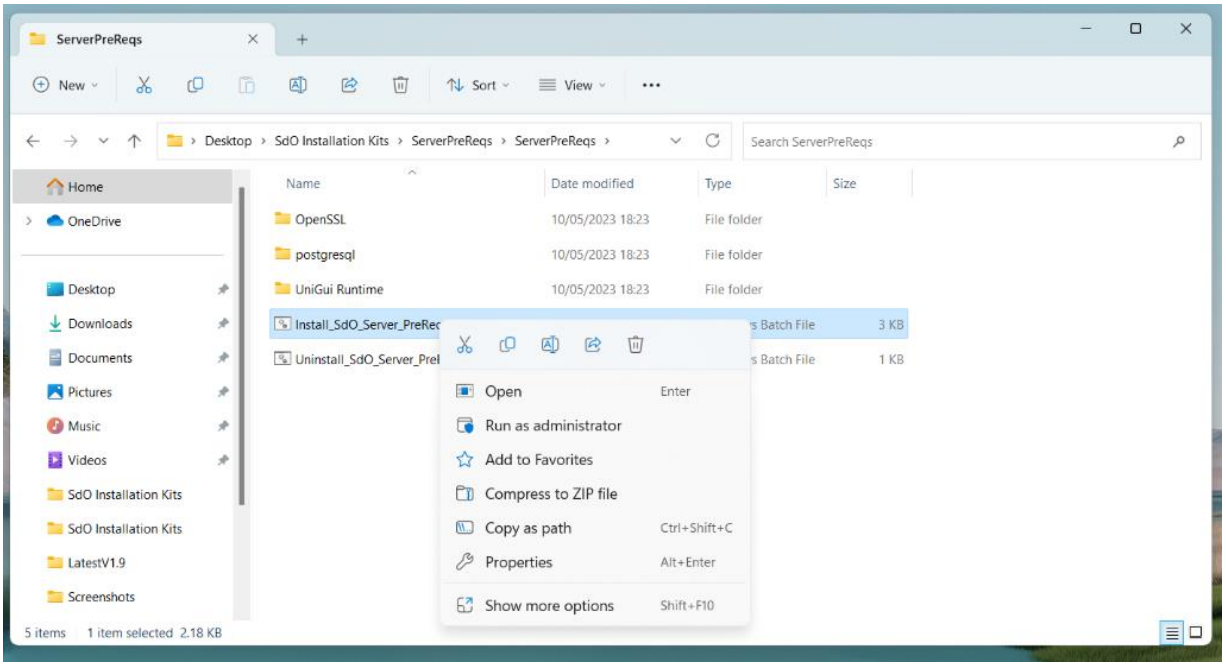
The zip archives can be unzipped/expanded by right-clicking on the zip file name and selecting "Extract all". Do this for both ServerPreReqs.zip and Server.zip:



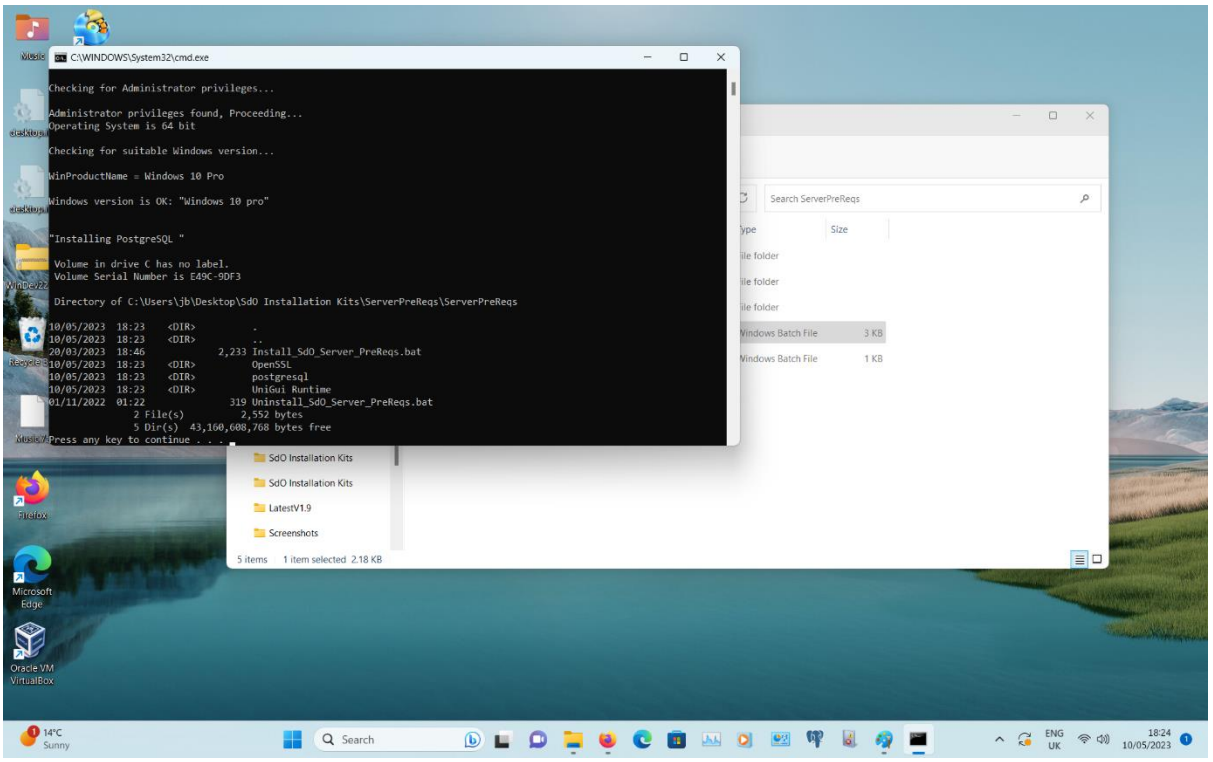
Click on the "ServerPreReqs" folder to display its contents:

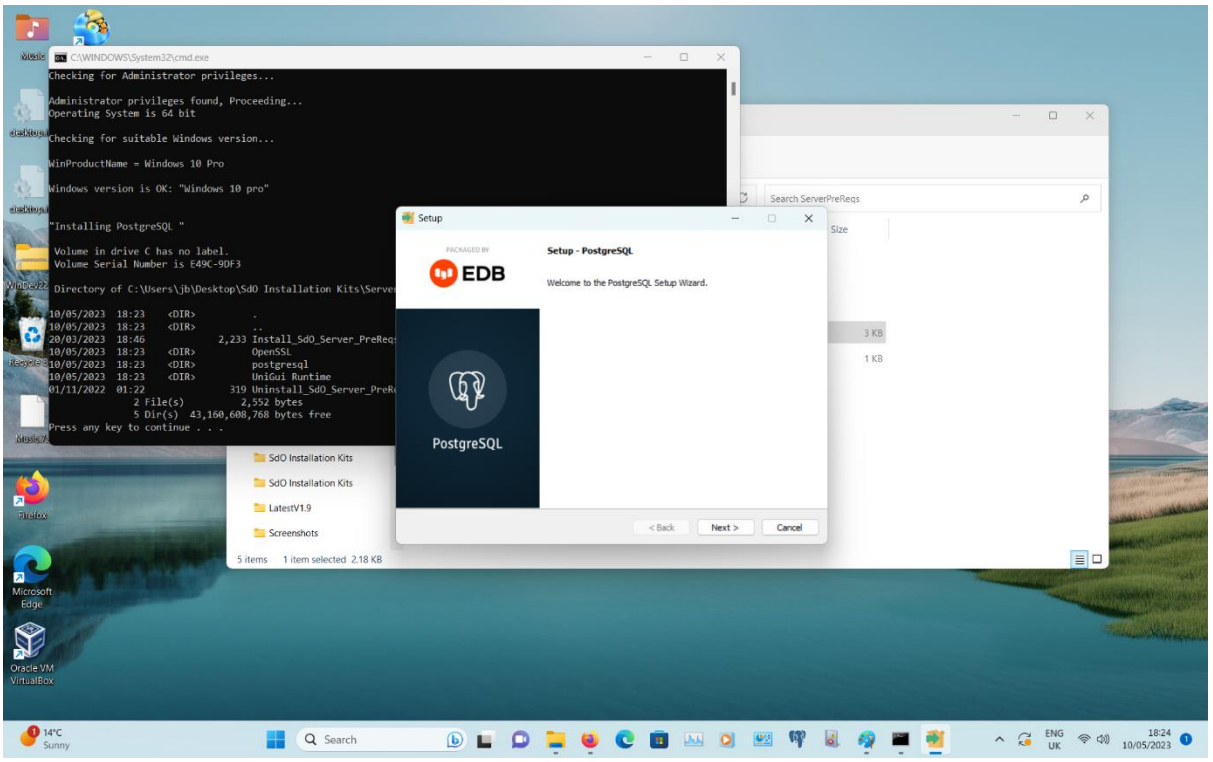


Select the command batch file Install_SdO_Server_PreReqs.bat, right-click and select “Run as administrator”

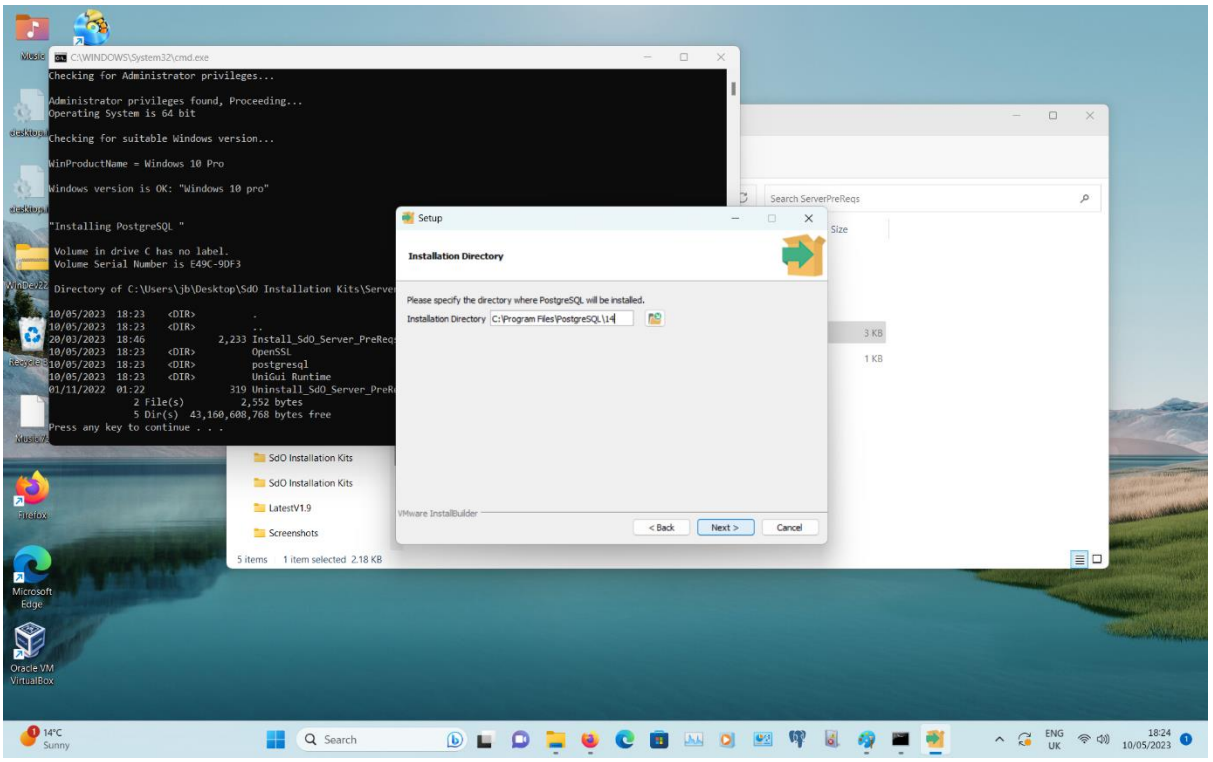


Follow the on-screen instructions, to install PostgreSQL and FMSoft uniGUI, selecting default values until prompted to provide a password for the PostgreSQL default user “postgres”:

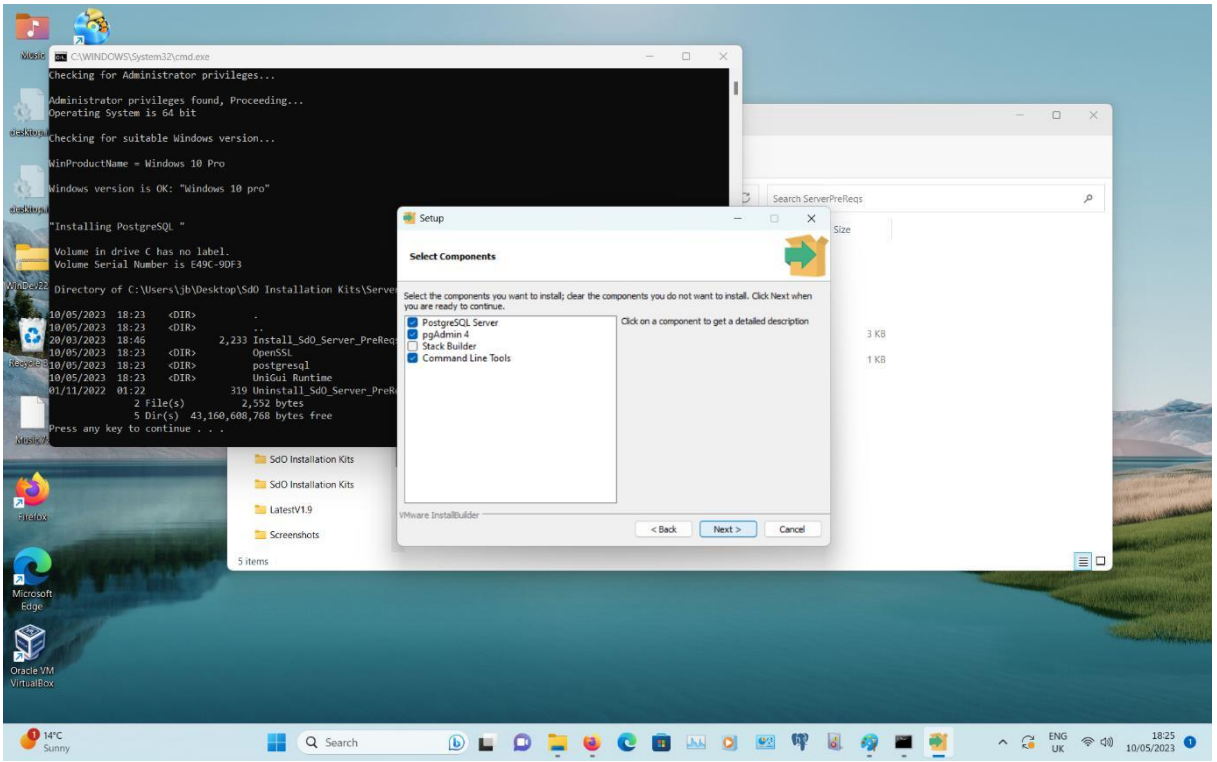




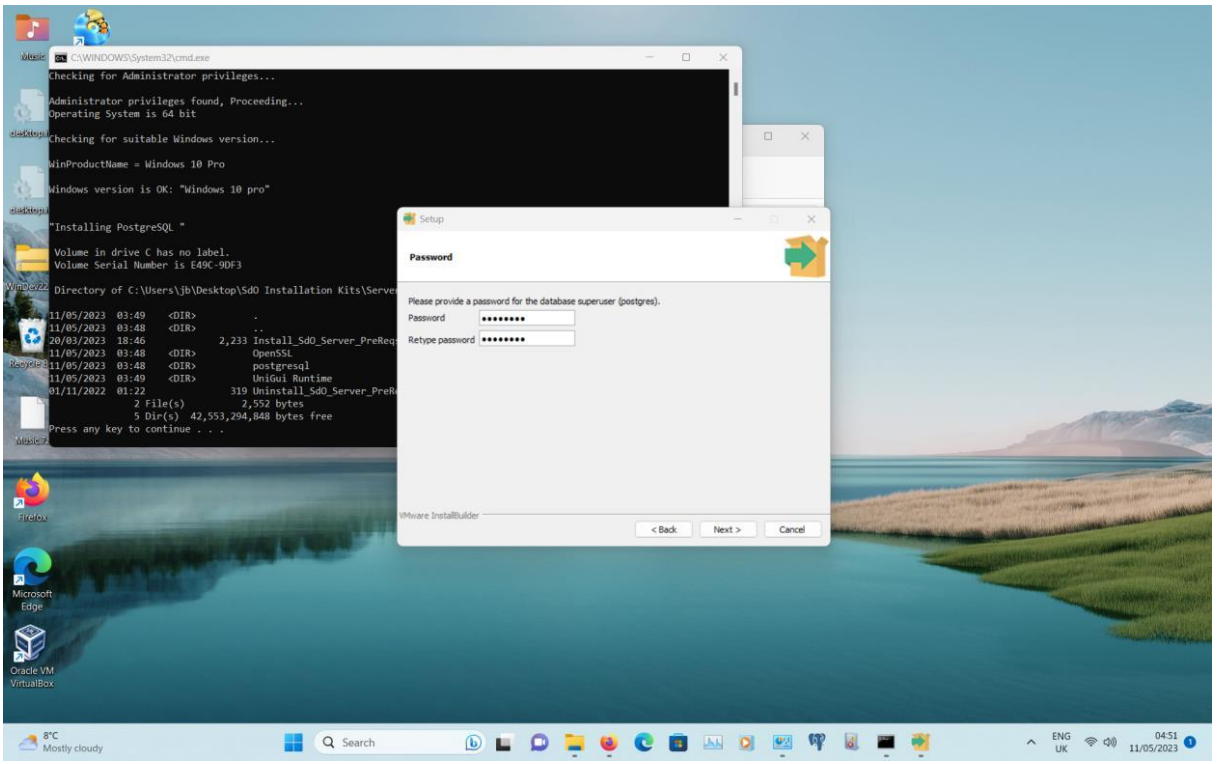
Click on “Next” to accept the default Installation Directory:

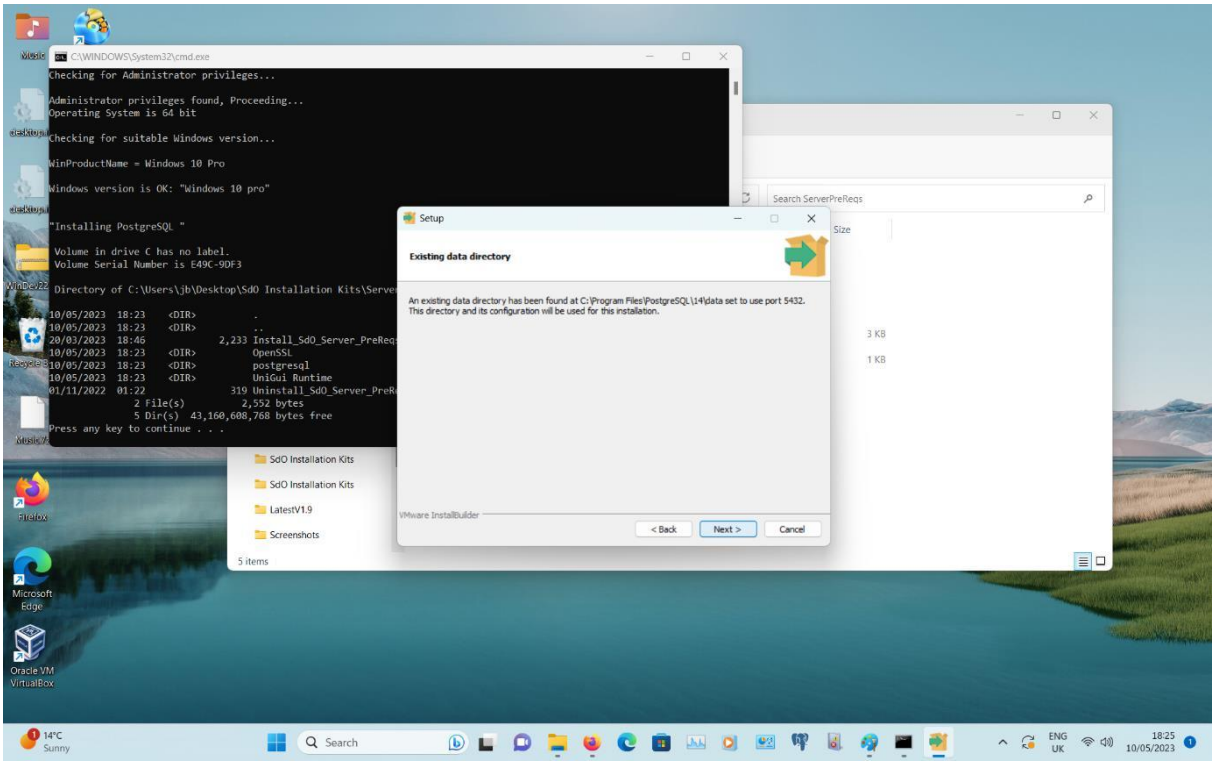


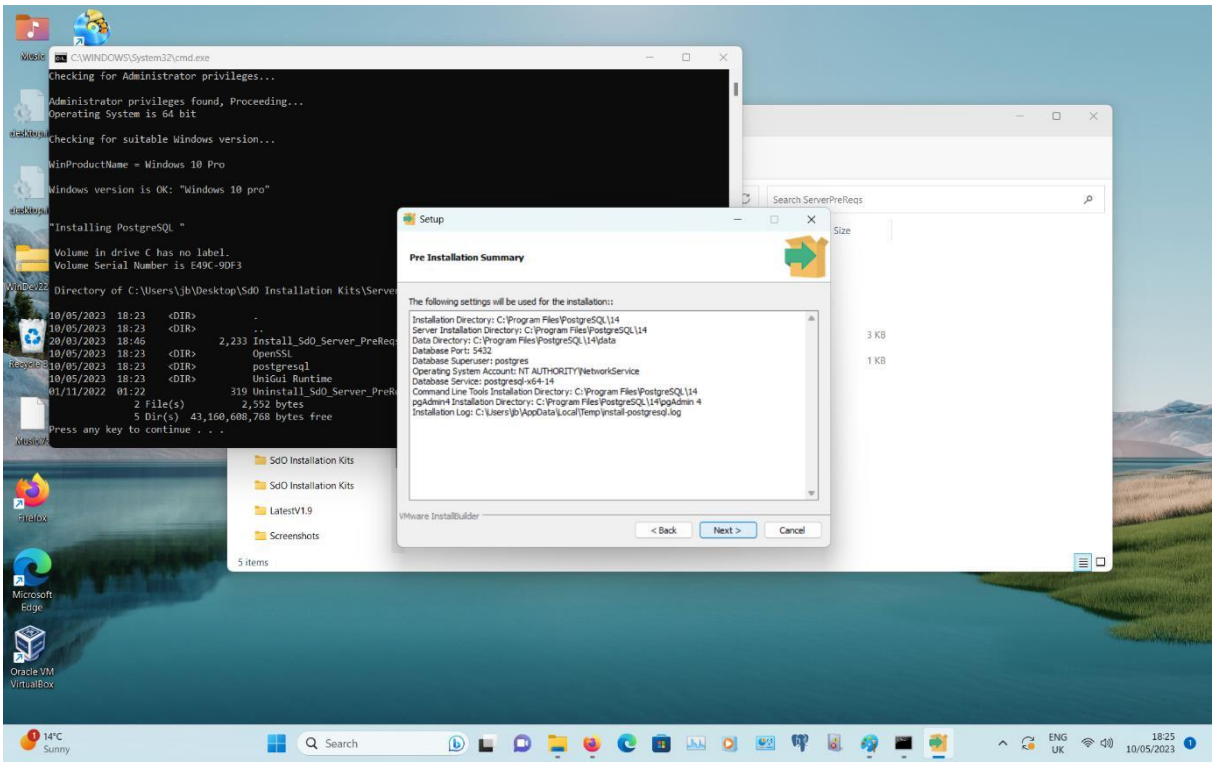
Note: The “Stack Builder” option in the following dialog is not required for SdO and can be unchecked.

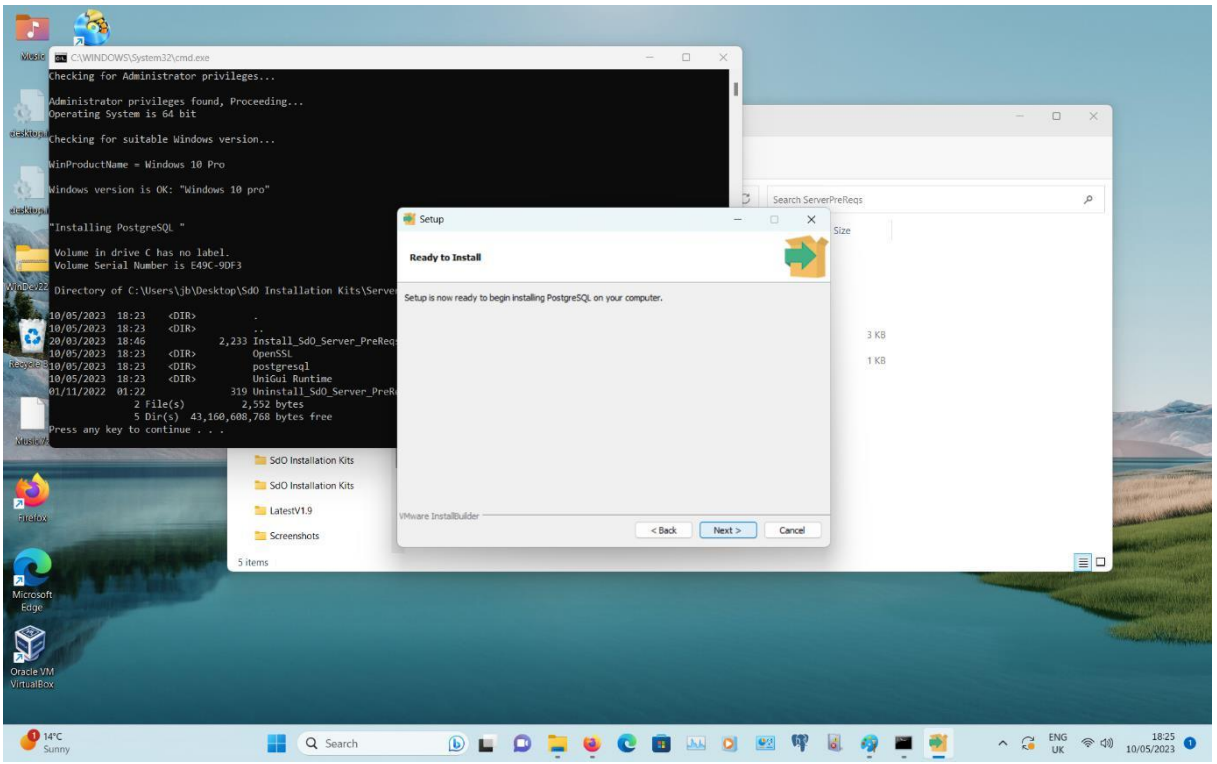


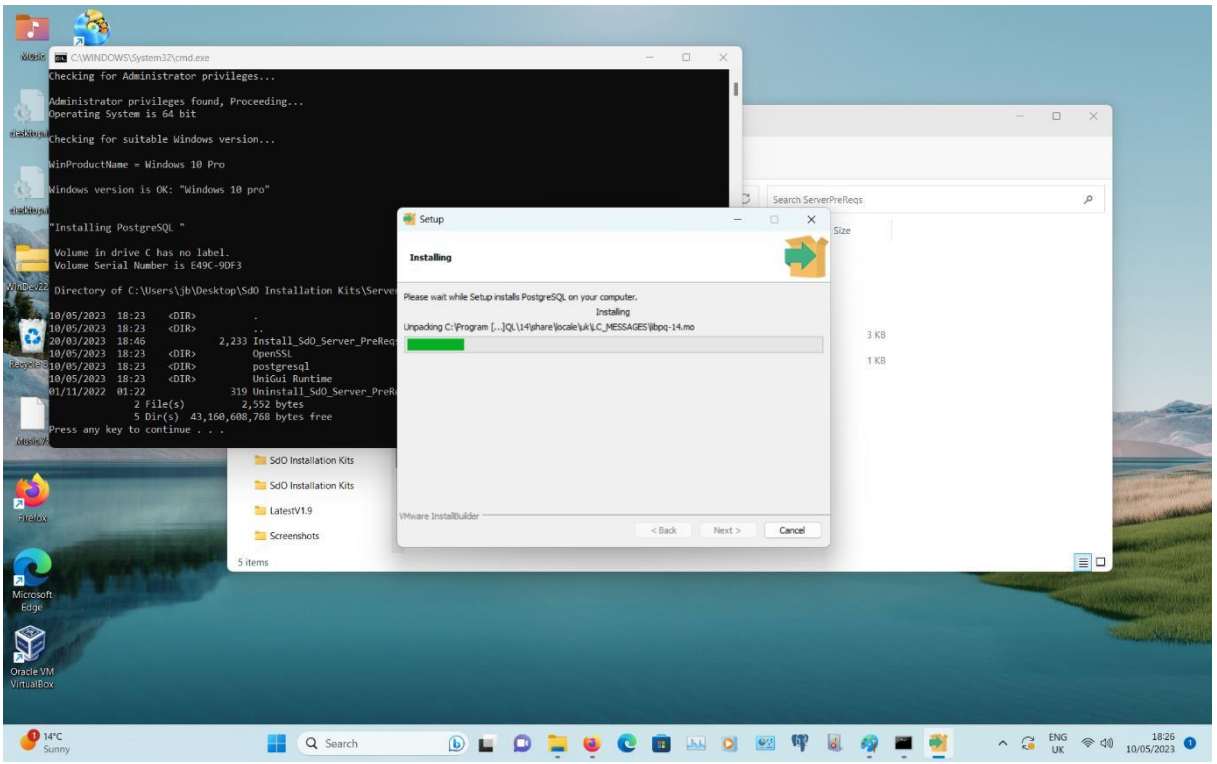
Enter the default password “rootuser” in the following dialog, this can be changed after SdO installation has been completed, first in PostgreSQL and then in SdO Admin App:

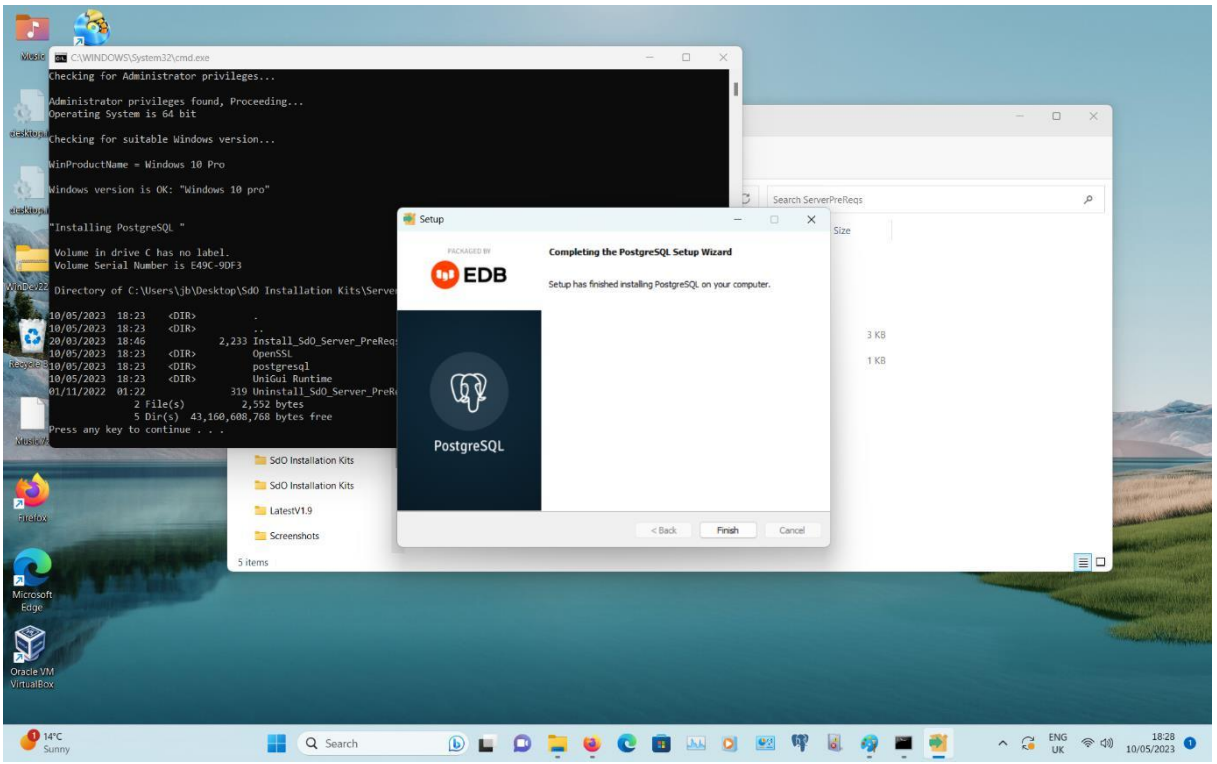




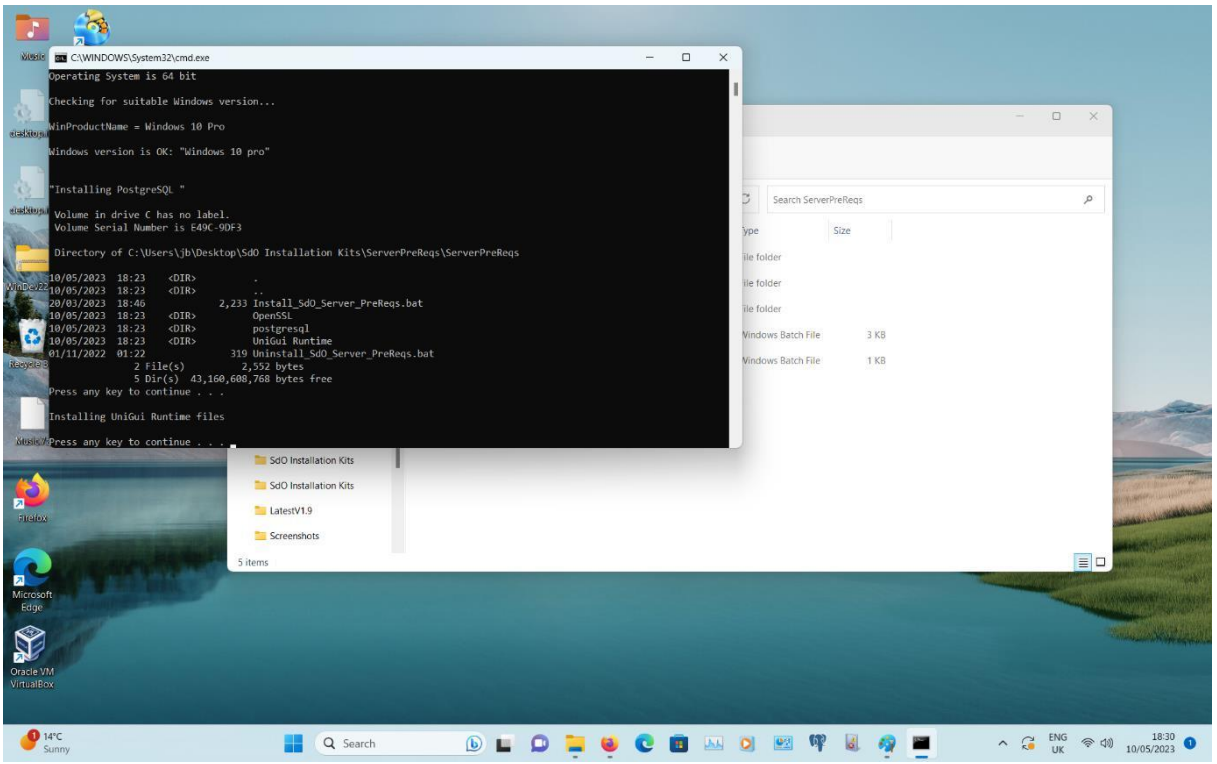








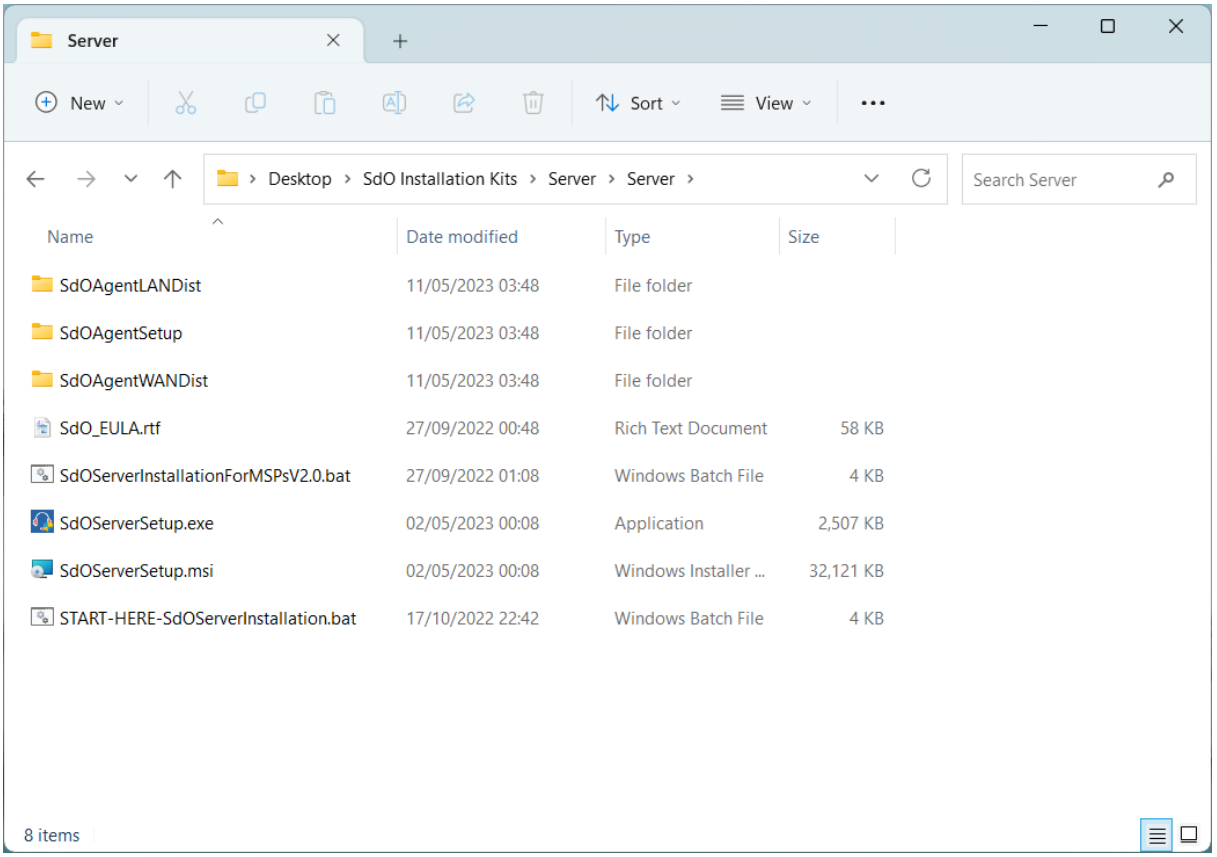
Once SdO Server Prerequisites installation has completed, “Press any key to continue” in the command line window.



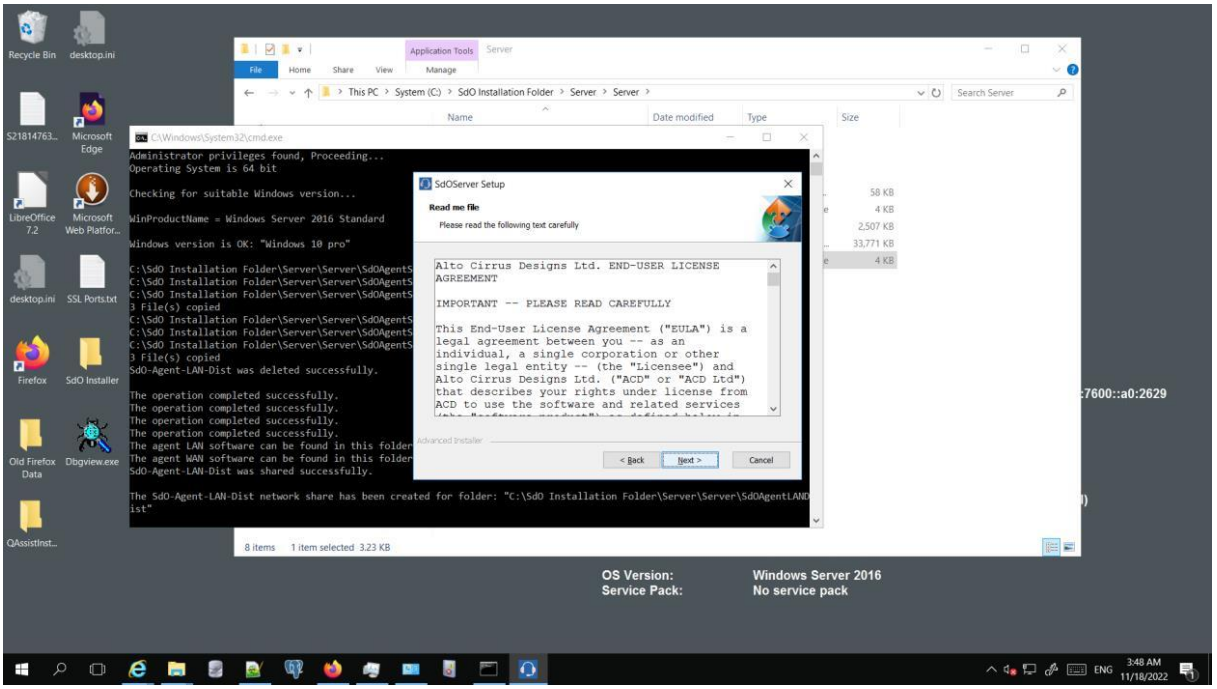
The SdO Server can now be installed.

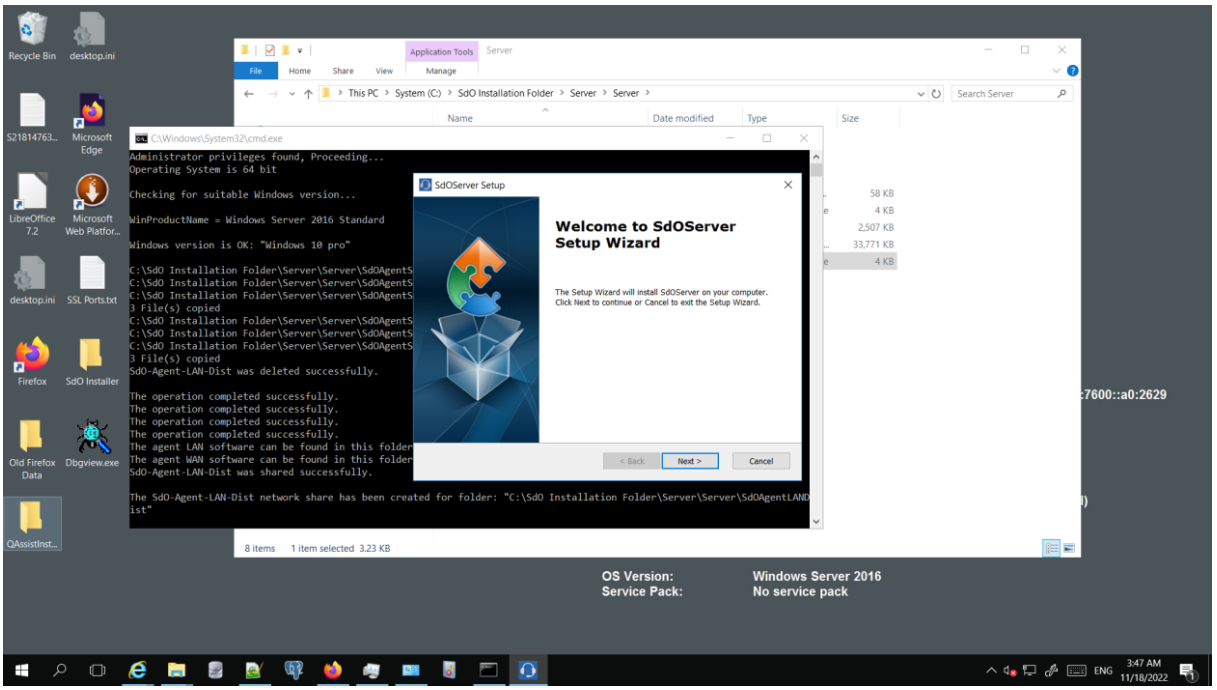
SdO Server Installation

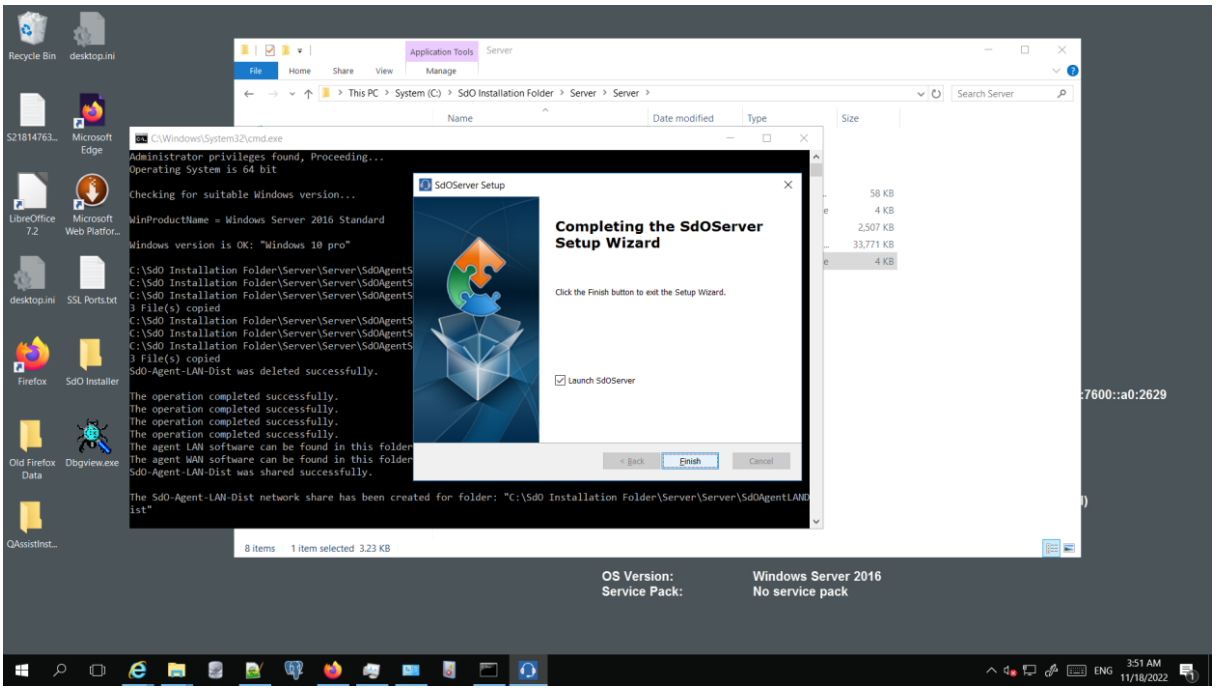
To install SdO Server, navigate to the folder containing the SdO Server installation files:



Right-click on the batch file “START-HERE-SdOServerInstallation.bat” and select “Run as administrator”. Follow the onscreen instructions to install SdO Server:

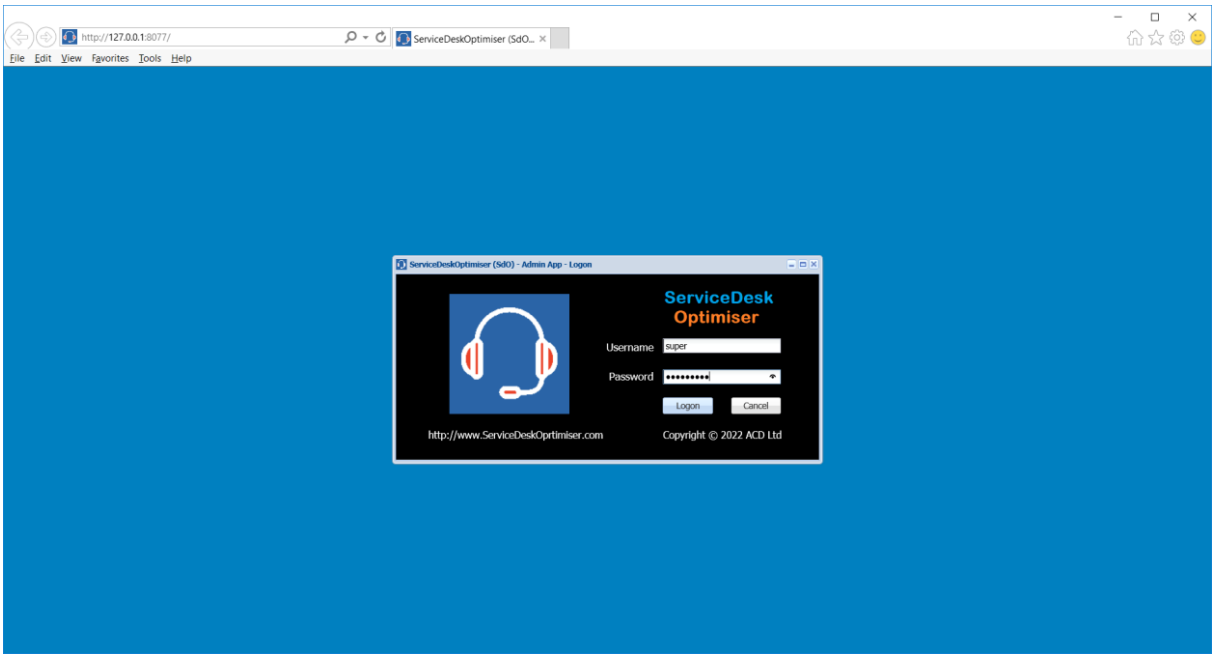


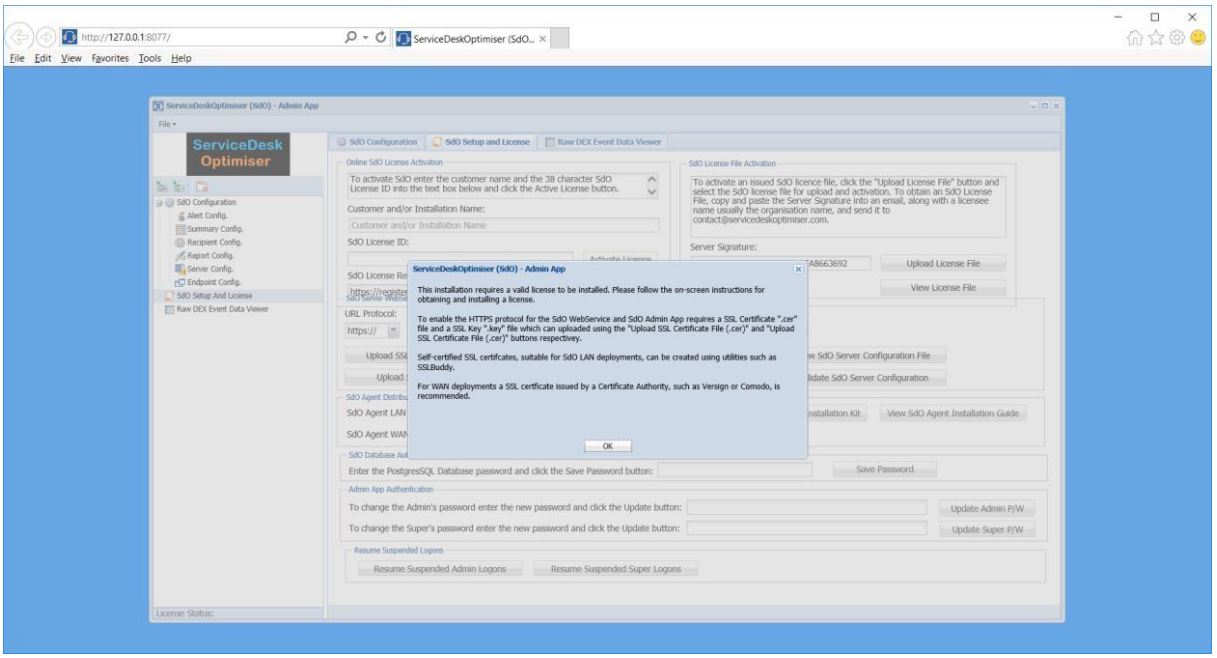




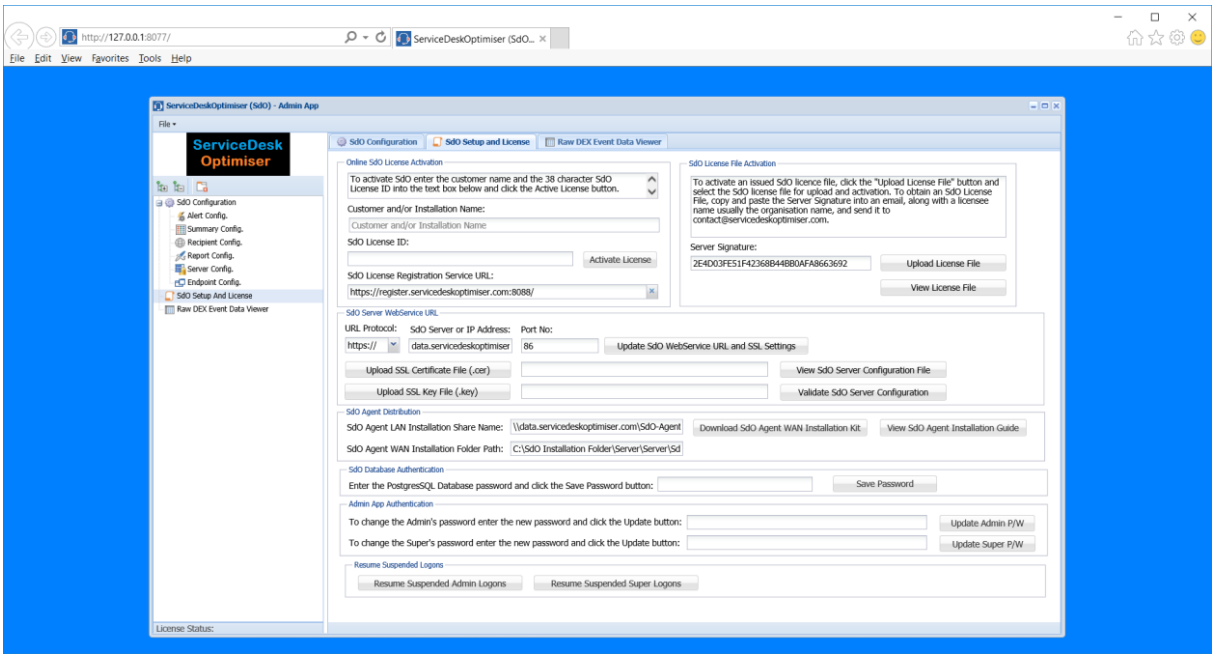
When the following dialog is displayed use the authentication credentials:

- Username: super
- Password: superlock

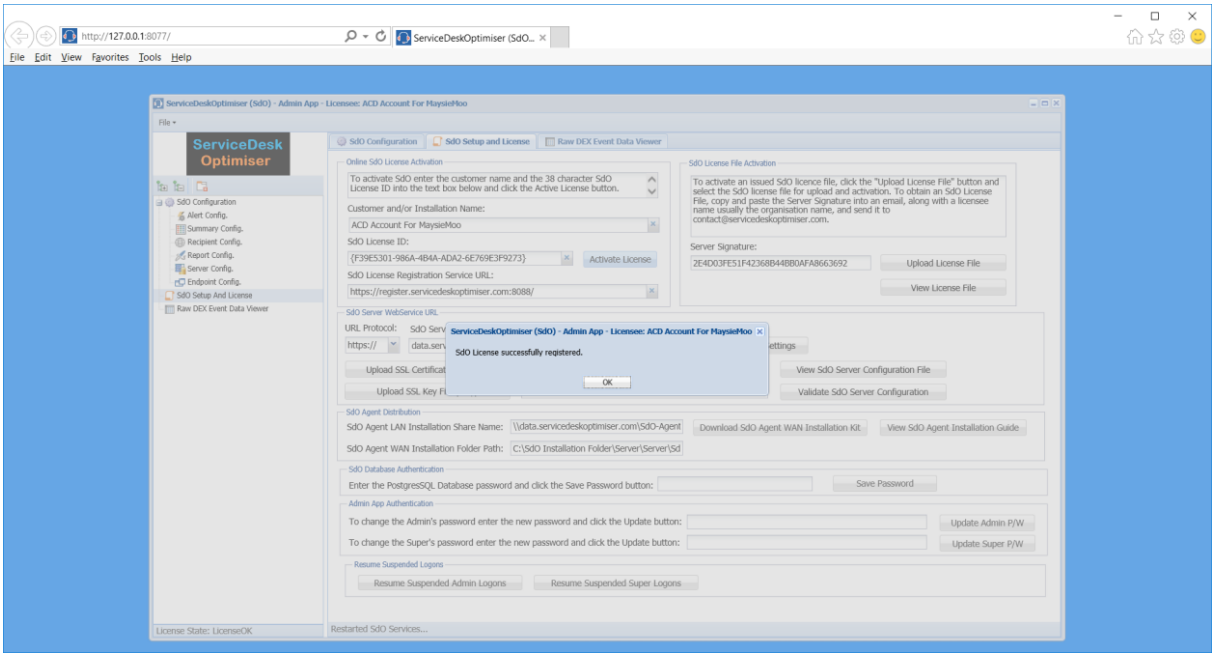




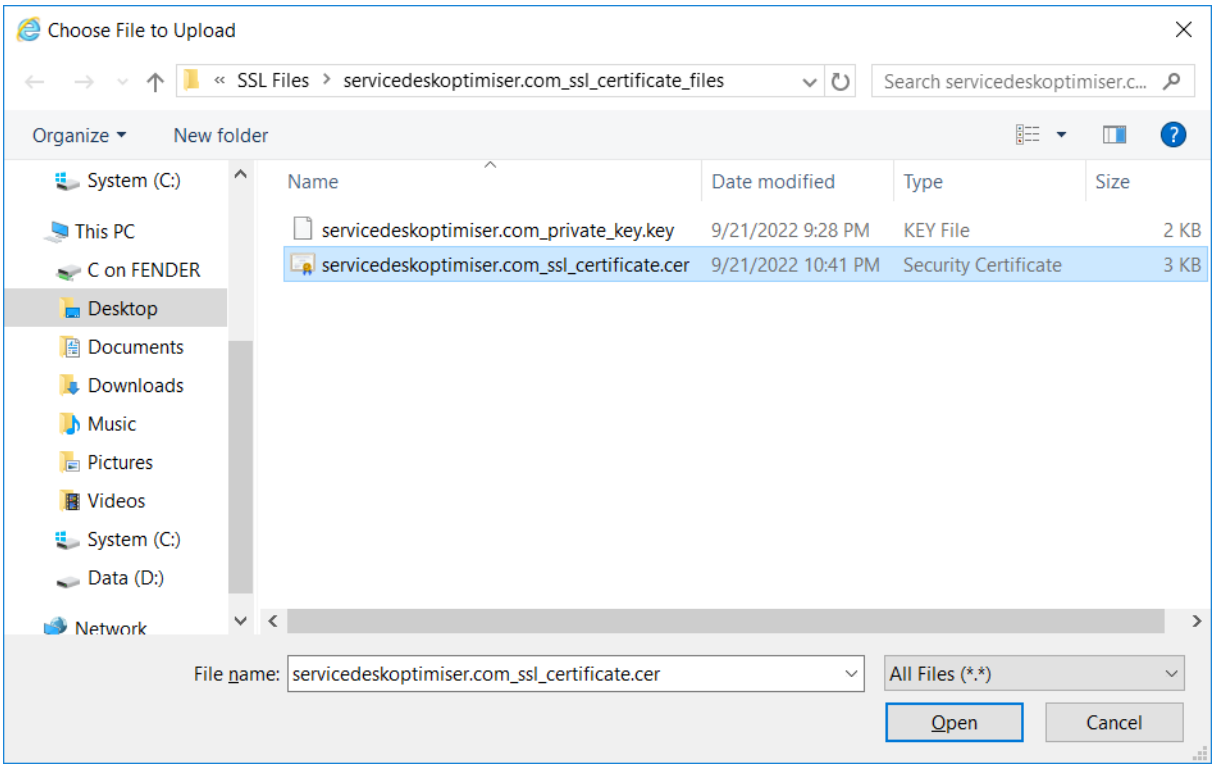
To register the SdO Server installation, enter a name/description in the “Customer and/or Installation Name” field e.g. “XYZ Inc – SdO Trial” and then enter a valid email address in the “Customer Email Address” field e.g. ops.manager@xyz.com. Then click on “Get/Update License”:

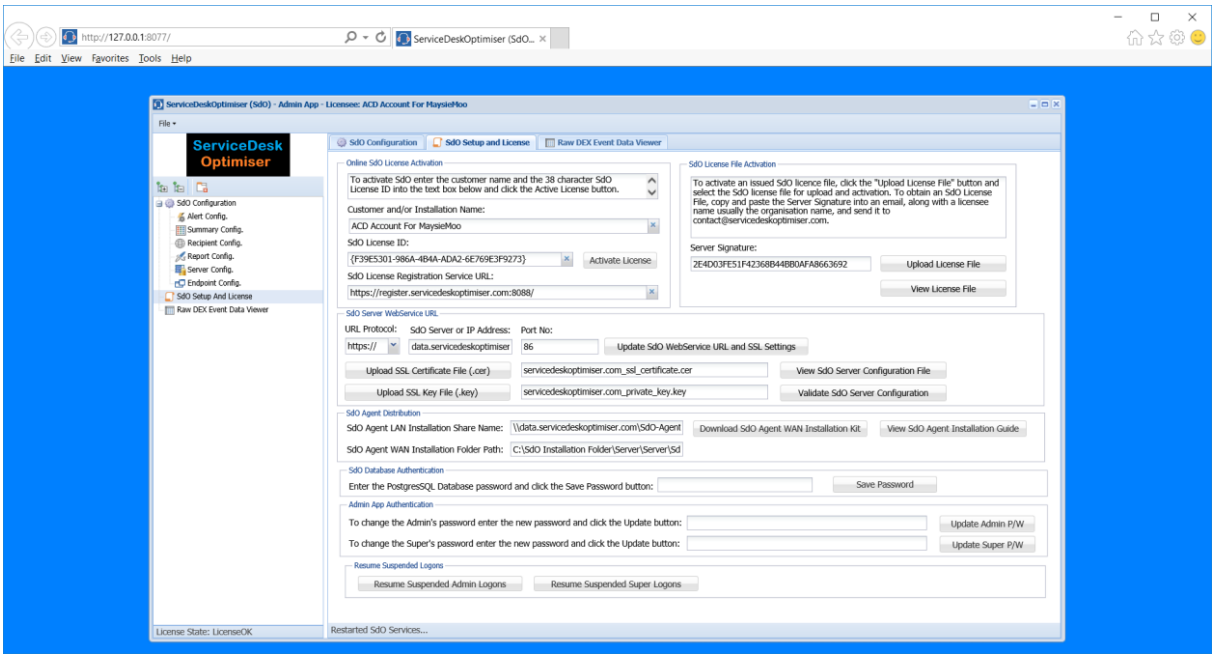


If all goes well, the following dialogue should be displayed:



If the installation of a SSL/HTTPS certificate and key is required e.g. as per “SdO Installation Recommendations” section then click on the “Upload SSL Certificate File (.cer)” button and follow the on screen dialogue. Repeat this process for the key file by clicking on the “Upload SSL Key File (.key)”. Ensure the “URL Protocol” field is set to “HTTPS://” and click on the “Update SdO WebServive URL and SSL Setting” button. See the screenshots below:





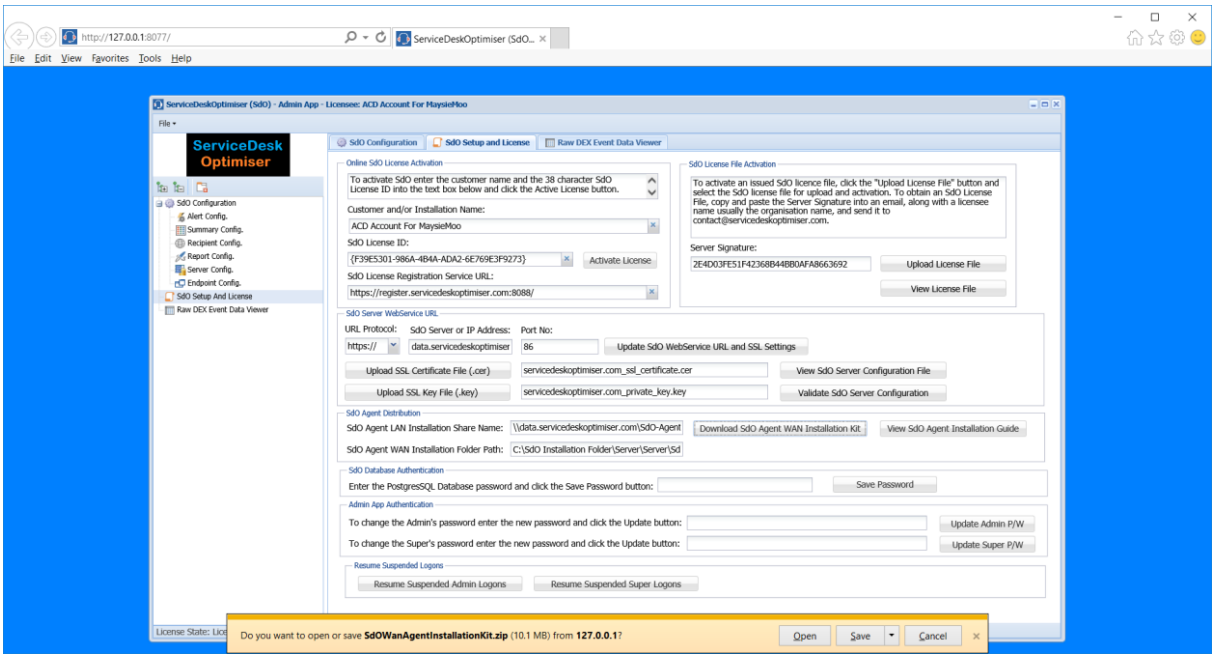
Important: PLEASE REBOOT THE SdO SERVER BEFORE CONTINUING…

SdO Agent Installation

For bulk SdO agent installation, using Group Policy, see the instructions below. For individual agent installations, e.g. as part of a trial, then follow these instructions: On the system where the SdO agent is to be installed, start a web browser and logon to the SdO Admin App using the URL http://SdOServer:8077 or https://SdOServer:8077 if HTTPS has been enabled.

Use username “super” and password “superlock”

Having logged on, click on the “SdO Setup and License” tab and then click on the “Download SdO Agent WAN Installation Kit”:

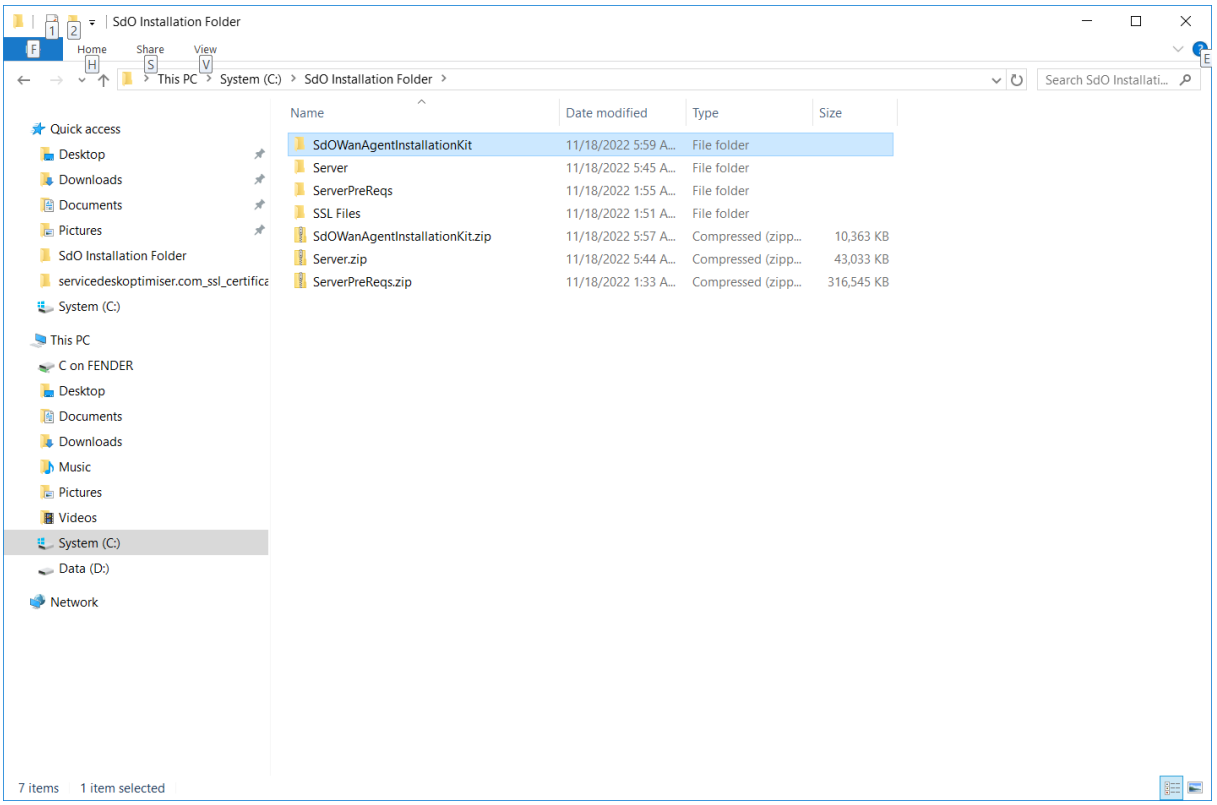


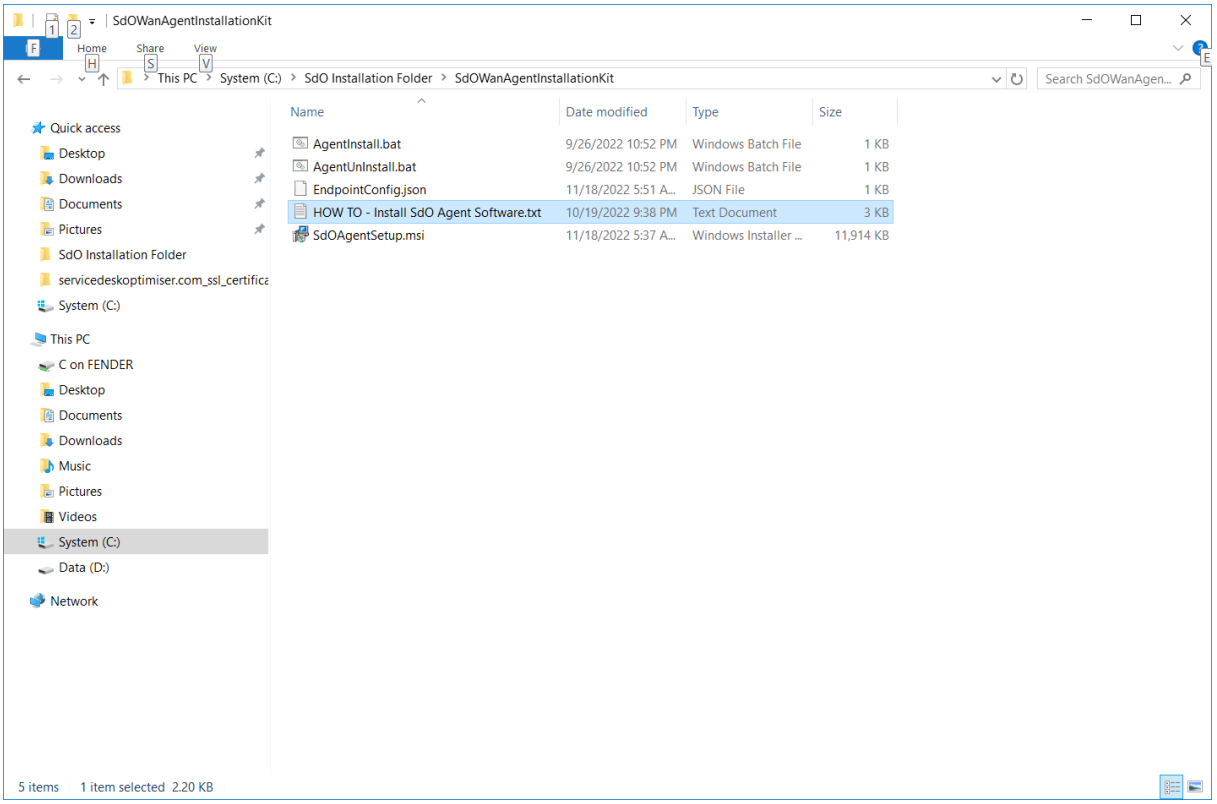
Copy the “SdOWanAgentinstallationKit.zip” file from the system “Downloads” folder to an installation folder e.g. “c:/SdO Installation Folder”.

Right click on the downloaded file and select “Properties”. Select “Unblock” and then “Apply” or “OK” to unblock the file. Right click on the downloaded file a second time and select “Extract All” to extract the file from the “SdOWanAgentinstallationKit.zip” zip archive.

Click on the “SdOWanAgentinstallationKit” folder and either:

- Click on “AgentInstall.bat” file to install the SdO agent on the current system or
- Click on “HOW TO – Install SdO Agent Software.txt” for further instructions on how to install the SdO on multiple systems, etc. Note: The contents of “HOW TO – Install SdO Agent Software.txt” are included below.





Here are the contents of “HOW TO – Install SdO Agent Software.txt”:

HOW TO – Install SdO Agent Software

==========

Note: Replace the "SDOserver" placeholder with the network name or IP address of the target SdO Server computer.

Install SDO Agents using AD Group Policy
==========

The SDOAgentSetup.msi is created using the AdvancedInstaller application, for instructions on how to distribute a MSI package using Windows Active Directory Group Policy follow this link to AdvancedInstaller's website:

https://www.advancedinstaller.com/user-guide/tutorial-gpo.html

The files required to install the SdO Agent are:

o SDOAgentSetup.msi
o EndpointConfig.json

Which can be found in SdOAgentLANDist folder on the SdO Server computer. If the SdO-Agent-Dist network share has been created during SdO Server installation it points to this folder. This means the SDO-Agent-Dist network share can be used in the Group Policy Object as the location of the SdO Agent installation kit using the UNC path \\SdOserver\SdO-Agent-Dist.

Install SdO Agents Manually using Batch Command Files
==========

Using RemoteInstall.bat for LAN endpoints:

The SdO-Agent-Dist network share is created on the target computer during the installation of the SdO Server:

- On the endpoint computer where the SdO Agent is to be installed, browse to the UNC path \\SdOserver\SdO-Agent-Dist using Windows Explorer

- Execute the RemoteInstall.bat command file by right clicking on the filename and selecting the "Run As Administrator" popup menu option

- The SdO Agent will be installed on the endpoint computer

Using AgentInstall.bat for WAN endpoints:

Note: The SdO-Agent-Dist network share cannot be used for WAN endpoint installations:

- Download the SdO agent Installation Kit zip archive by clicking on the "Download SdO Agent WAN Installation Kit" button in SdO Admin App "SdO Setup and License" page

- Extract the files located in the installation kit zip file into a temporary folder on the endpoint computer

- Execute the AgentInstall.bat command file by right clicking on the filename and selecting the "Run As Administrator" popup menu option

- The SdO Agent will be installed on the endpoint computer

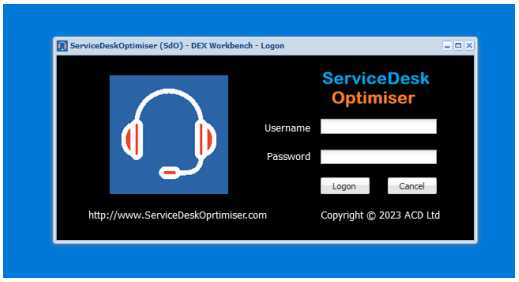
End of File

SdO Workbench User Guide

Underpinned by a Digital Experience Rating (DXR) metric, SdO workbench is a web-based application that is the primary operational interface for SdO. Capabilities include:

- Viewing alerts, for instance, alerts that are raised when users are experiencing a degraded user experience (aka digital user experience or DEX)
- Viewing management displays and reports:
    1. Desktop app/Web app Usage inventory – based on active usage times
    2. Computer DXR Histories – automated Before/After DXR analysis of computer hardware and software configuration changes
- Monitoring SdO system status
- Real-time DXR monitoring, including a dynamic display of all active user sessions and digital experience rating (DXR) for each active session.
- User Experience Replay – Custom visualization for deep- DXR investigations

SdO Workbench Logon Form



SdO Workbench is invoked in a browser using the following URL:

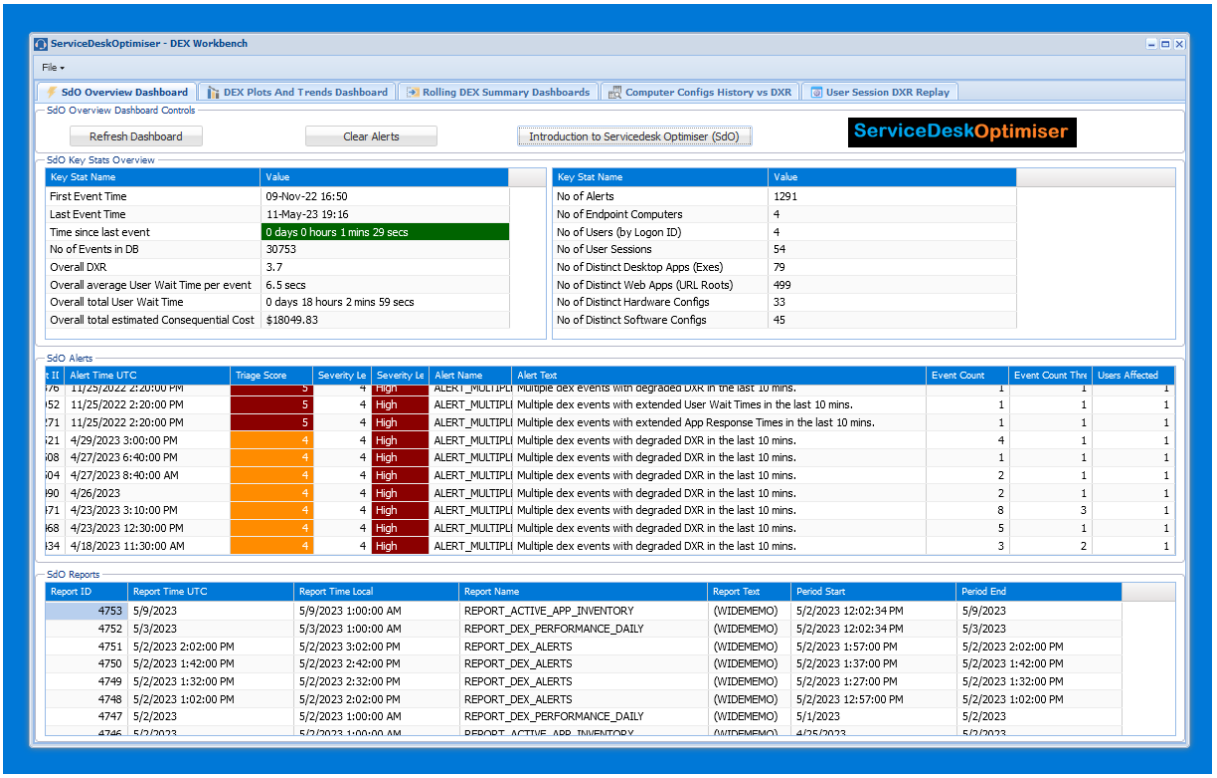
https://data.servicedeskoptimiser.com:8096

The default logon credentials are:

Username: super (or admin)
Password: superlock (or adminlock)

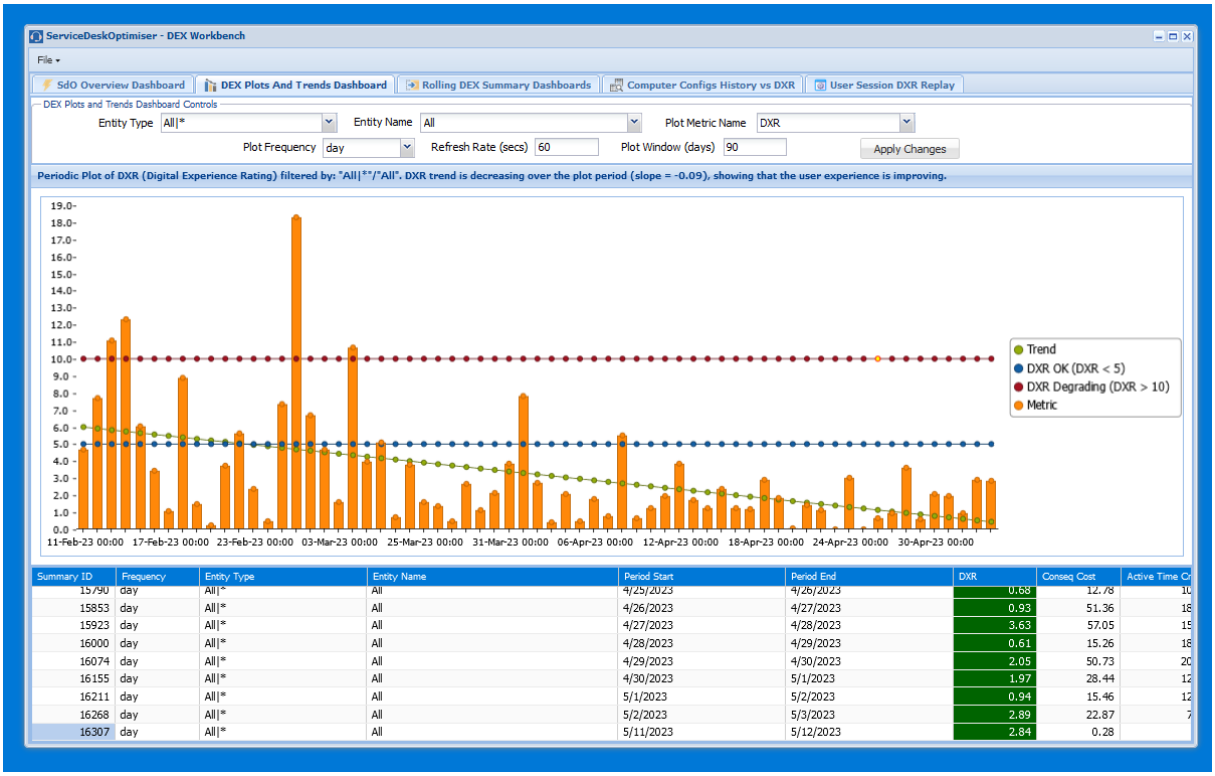
Click on the Logon button to log on.

SdO Overview Dashboard



The SdO Overview Dashboard includes the following sections:

- SdO Overview Dashboard Controls
    1. Refresh Dashboard – refresh dashboard values
    2. Clear Alerts – clear the current alerts list (Alerts may also have been forwarded as emails to designated recipients including Service Desk systems)
    3. Introduction to Service Desk Optimiser (link to SdO Website)
- SdO Key Stats Overview - An overview of key SdO operational statistics
- SdO Alerts - A list of the latest alerts in triage score/severity level order
    1. Note: alerts can be cleared by clicking on the Clear Alerts button
    2. Alert conditions are defined in the Alert Configuration section of the SdO Admin App
    3. While this display can be used to monitor SdO alerts, alerts can also create “push” alerts, such as emails. Email recipients can be defined in the Recipients Configuration of the SdO Admin App
- SdO Reports - A list of the latest reports generated by SdO
    1. Reports are defined in the Report Configuration section of the SdO Admin App



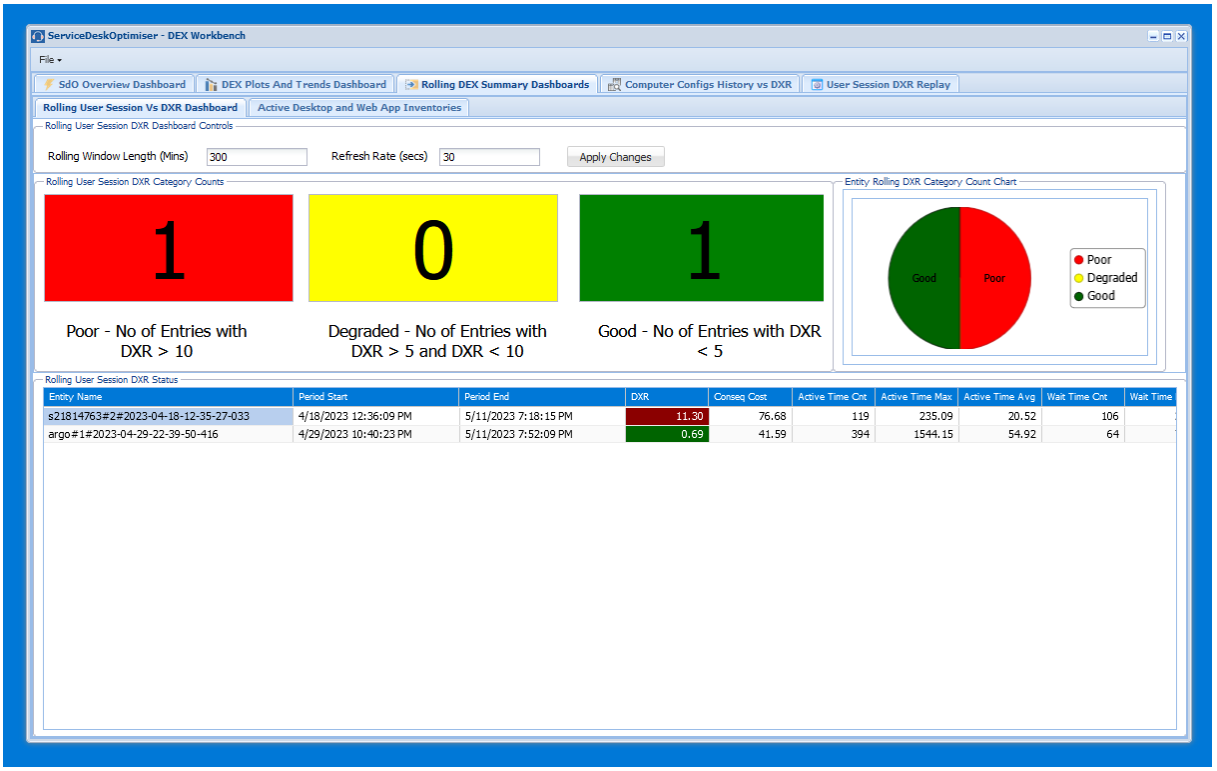
The DEX Plots and Trends Dashboard displays:

DEX Summary Dataset Plots and Trends Dashboard has the following sections:

- DEX Plots and Trends Dashboard Controls
  - Entity Type – Typically “All|*” where “All” means no specific event field and “|*” means all events. If Entity Type is, for example, “Exename|*” means the data subset is filtered by the “Exename” field
  - Entity Name – “All” means all events, but if Entity Type is, for example, “Exename|*” then Entity Name can be selected from a list of Exename
  - Plot Metric Name – typically “DXR” but can also be “UserWaitTime” or “ConsequentialCost”
  - Plot Frequency – typically “Day” i.e. the summary dataset is summarised into 24 hour buckets
  - Refresh Rate – the plot refresh rate, typically 60 seconds
  - Plot Window – the number of days, ending at the current day, to be included in the chart, typically 90 days
- DEX Metric Chart
  - When the selected metric is “DXR” a Trend Line for DXR values is also plotted, as well as lines indicating good/degrading/poor DXR thresholds
- DEX Metric Chart Table
  - A table of the values plotted in the DEX Metric Chart

Note: DEX Summary Datasets are defined in the Summary Dataset Configuration section of the SdO Admin App.

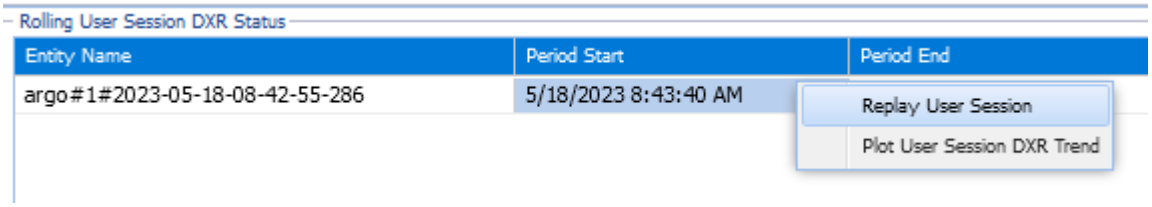
Rolling User Session vs DXR Dashboard



The Rolling User Session vs DXR Dashboard displays the current DXR value for active user sessions. This dashboard is primarily intended for use by Service Desk managers and staff to quickly identify user sessions that are experiencing a degrading user experience before the user has even opened a ticket.

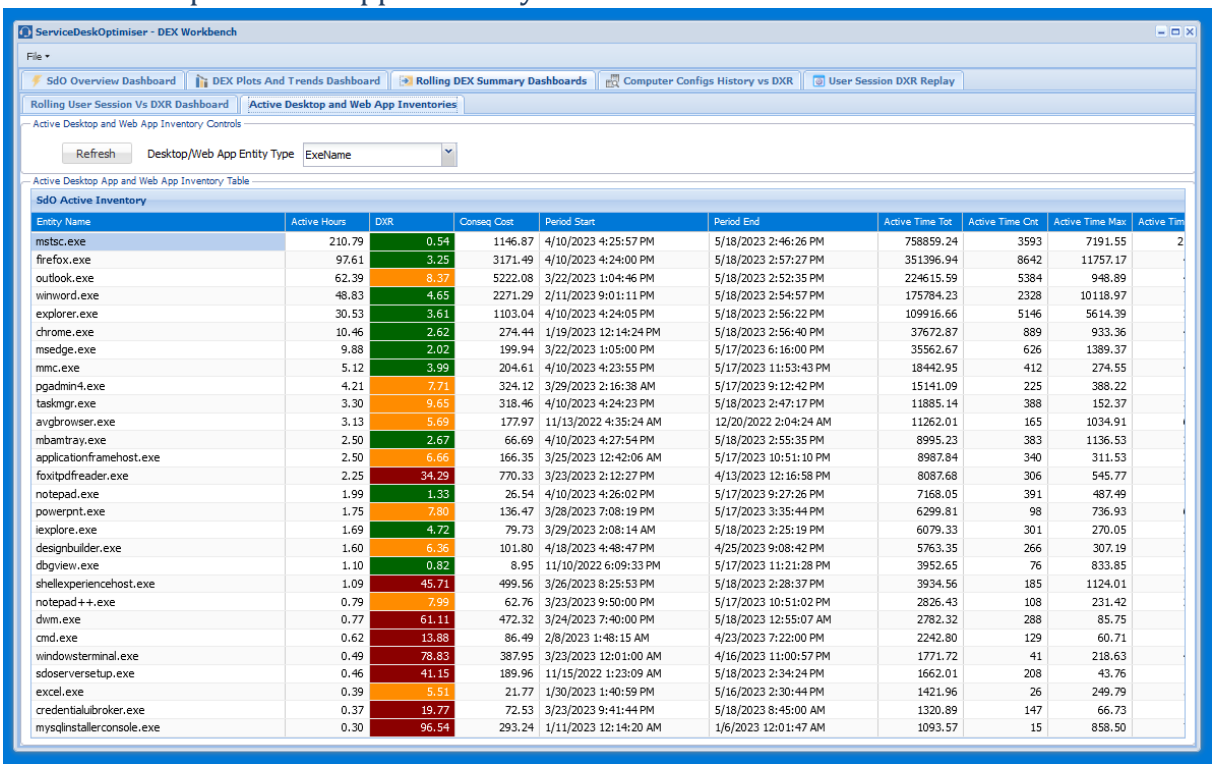
The Rolling User Session vs DXR Dashboard includes the following sections:

- Rolling User Session DXR Category Counts – the breakdown of currently active user sessions by DXR band/category, where:
  - A DXR value of below 5 is considered “OK” i.e. less than 5% of the user’s time is spent waiting for the system to respond
  - DXR values of between “5 and 10 are consider “Degraded”
  - DXR values over 10 are consider “Poor” i.e. over 10% of the user’s time is spent waiting for the system to respond
- Rolling User Session DXR Stats table – Particularly the DXR value of each active user session
  - Drilldown – For drilldown options, right-click on the row of interest and the following context menu will be displayed:



  - Click on “Replay User Session” to invoke the User Session Replay utility.
  - Click on “Plot User Session DXR” to display a DXR trend plot for the user session.

Active Desktop and Web App Inventory Dashboard



Entity Name	Active Hours	DXR	Conseq Cost	Period Start	Period End	Active Time Tot	Active Time Cnt	Active Time Max	Active Tim
mstsc.exe	210.79	0.54	1146.87	4/10/2023 4:25:57 PM	5/18/2023 2:46:26 PM	758859.24	3593	7191.55	2
firefox.exe	97.61	3.25	3171.49	4/10/2023 4:24:00 PM	5/18/2023 2:57:27 PM	351396.94	8642	11757.17	
outlook.exe	62.39	8.37	5222.08	3/22/2023 1:04:46 PM	5/18/2023 2:52:35 PM	224615.59	5384	948.89	
winword.exe	48.83	4.65	2271.29	2/11/2023 9:01:11 PM	5/18/2023 2:54:57 PM	175784.23	2328	10118.97	
explorer.exe	30.53	3.61	1103.04	4/10/2023 4:24:05 PM	5/18/2023 2:56:22 PM	109916.66	5146	5614.39	
chrome.exe	10.46	2.62	274.44	1/19/2023 12:14:24 PM	5/18/2023 2:56:40 PM	37672.87	889	933.36	
msedge.exe	9.88	2.02	199.94	3/22/2023 1:05:00 PM	5/17/2023 6:16:00 PM	35562.67	626	1389.37	
mmc.exe	5.12	3.99	204.61	4/10/2023 4:23:55 PM	5/17/2023 11:53:43 PM	18442.95	412	274.55	
pgadmin4.exe	4.21	7.71	324.12	3/29/2023 2:16:38 AM	5/17/2023 9:12:42 PM	15141.09	225	388.22	
taskmgr.exe	3.30	9.65	318.46	4/10/2023 4:24:23 PM	5/18/2023 2:47:17 PM	11885.14	388	152.37	
avgbrowser.exe	3.13	5.69	177.97	11/13/2022 4:35:24 AM	12/20/2022 2:04:24 AM	11262.01	165	1034.91	
mbamtray.exe	2.50	2.67	66.69	4/10/2023 4:27:54 PM	5/18/2023 2:55:35 PM	8995.23	383	1136.53	
applicationframehost.exe	2.50	6.66	166.35	3/25/2023 12:42:06 AM	5/17/2023 10:51:10 PM	8987.84	340	311.53	
foxitpdfreader.exe	2.25	34.29	770.33	3/23/2023 2:12:27 PM	4/13/2023 12:16:58 PM	8087.68	306	545.77	
notepad.exe	1.99	1.33	26.54	4/10/2023 4:26:02 PM	5/17/2023 9:27:26 PM	7168.05	391	487.49	
powerpnt.exe	1.75	7.80	136.47	3/28/2023 7:08:19 PM	5/17/2023 3:35:44 PM	6299.81	98	736.93	
iexplore.exe	1.69	4.72	79.73	3/29/2023 2:08:14 AM	5/18/2023 2:25:19 PM	6079.33	301	270.05	
designbuilder.exe	1.60	6.36	101.80	4/18/2023 4:48:47 PM	4/25/2023 9:08:42 PM	5763.35	266	307.19	
dbgview.exe	1.10	0.82	8.95	11/10/2022 6:09:33 PM	5/17/2023 11:21:28 PM	3952.65	76	833.85	
shellexperiencehost.exe	1.09	45.71	499.56	3/26/2023 8:25:53 PM	5/18/2023 2:28:37 PM	3934.56	185	1124.01	
notepad++.exe	0.79	7.99	62.76	3/23/2023 9:50:00 PM	5/17/2023 10:51:02 PM	2826.43	108	231.42	
dwm.exe	0.77	61.11	472.32	3/24/2023 7:40:00 PM	5/18/2023 12:55:07 AM	2782.32	288	85.75	
cmd.exe	0.62	13.88	86.49	2/8/2023 1:48:15 AM	4/23/2023 7:22:00 PM	2242.80	129	60.71	
windowsterminal.exe	0.49	78.83	387.95	3/23/2023 12:01:00 AM	4/16/2023 11:00:57 PM	1771.72	41	218.63	
sdoserversetup.exe	0.46	41.15	189.96	11/15/2022 1:23:09 AM	5/18/2023 2:34:24 PM	1662.01	208	43.76	
excel.exe	0.39	5.51	21.77	1/30/2023 1:40:59 PM	5/16/2023 2:30:44 PM	1421.96	26	249.79	
credentialuibroker.exe	0.37	19.77	72.53	3/23/2023 9:41:44 PM	5/18/2023 8:45:00 AM	1320.89	147	66.73	
mysqlinstallerconsole.exe	0.30	96.54	293.24	1/11/2023 12:14:20 AM	1/6/2023 12:01:47 AM	1093.57	15	858.50	

The Active Desktop and Web App Inventory Dashboard displays a list of the most actively used Desktop Apps, identified by exe name (aka executable name), and Web Apps, identified by URL root (aka Universal Resource Locator) in descending order. As these are rolling summaries, the values are accumulated from the moment that SdO is installed for all user sessions.

The Active Desktop and Web App Inventory Dashboard has the following sections:

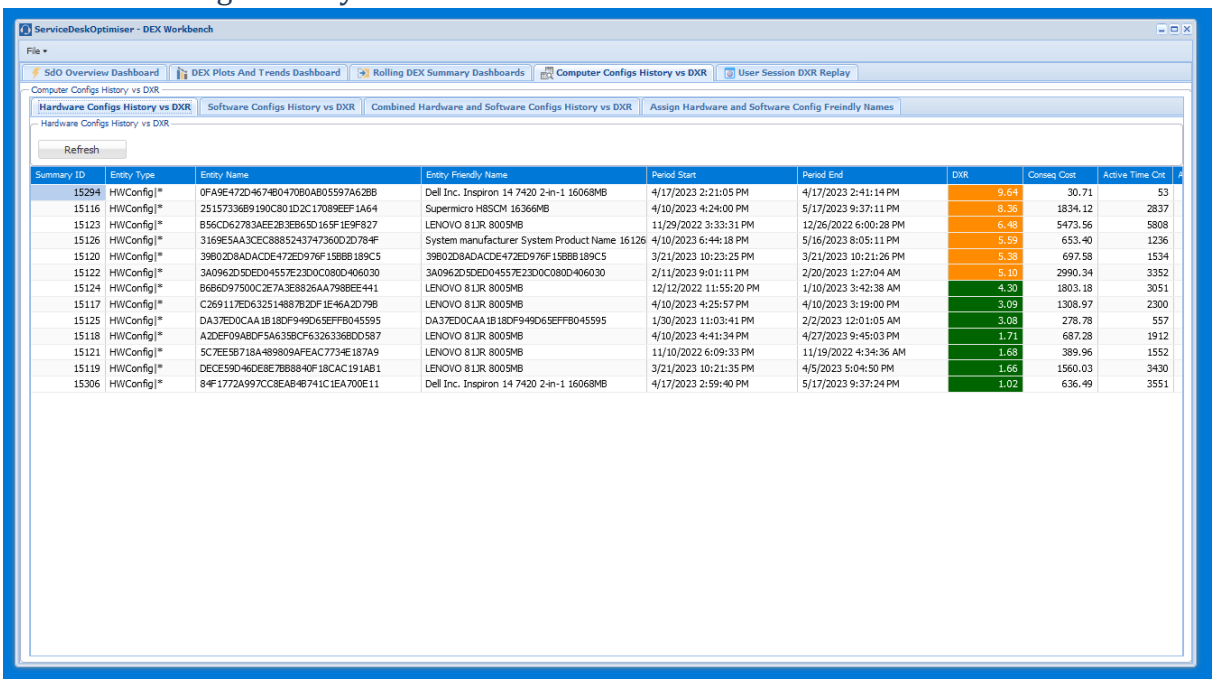
- Active Desktop and Web App Inventory Controls
  - Desktop/Web App Entity Type – ExeName or URLRoot
  - Refresh – Refresh display
- Active Desktop and Web App Inventory Table
  - The list of Desktop Apps or Web Apps in descending order of active use

Computer Configs History vs DXR

Computer hardware and software configuration changes are recorded by the SdO agent on each boot or restart and stored in the SdO database as Rolling Summaries. Each DEX event includes a hash values of the current hardware config and software config which are used to calculate the rolling DXR for each hardware and software config.

This forms Computer DXR Histories, like medical records, for each endpoint computer (PC, workstation, VDI server, etc.) providing an automated register of hardware and software configuration changes and how these changes affect the overall DXR score of the computer.

Hardware Configs History vs DXR



Summary ID	Entity Type	Entity Name	Entity Friendly Name	Period Start	Period End	DXR	Conseq Cost	Active Time Cnt
15294	HWConfig|*	0FA9E472D4674B0470B0AB05597A62BB	Dell Inc. Inspiron 14 7420 2-in-1 16068MB	4/17/2023 2:21:05 PM	4/17/2023 2:41:14 PM	9.64	30.71	53
15116	HWConfig|*	25157336B9190C801D2C17089EEF1A64	Supermicro H8SCM 16366MB	4/10/2023 4:24:00 PM	5/17/2023 9:37:11 PM	8.36	1834.12	2837
15123	HWConfig|*	B56CD62783AEE2B3EB65D165F1E9F827	LENOVO 81JR 8005MB	11/29/2022 3:33:31 PM	12/26/2022 6:00:28 PM	6.48	5473.56	5808
15126	HWConfig|*	3169E5AA3CEC88852437473600D2D784F	System manufacturer System Product Name 16126	4/10/2023 6:44:18 PM	5/16/2023 8:05:11 PM	5.59	653.40	1236
15120	HWConfig|*	39B02D8ADACDE472ED976F15BBB189C5	39B02D8ADACDE472ED976F15BBB189C5	3/21/2023 10:23:25 PM	3/21/2023 10:21:26 PM	5.38	697.58	1534
15122	HWConfig|*	3A0962D5DED04557E23D0C080D406030	3A0962D5DED04557E23D0C080D406030	2/11/2023 9:01:11 PM	2/20/2023 1:27:04 AM	5.10	2990.34	3352
15124	HWConfig|*	B6B6D97500C2E7A3E8826AA798BEE441	LENOVO 81JR 8005MB	12/12/2022 11:55:20 PM	1/10/2023 3:42:38 AM	4.30	1803.18	3051
15117	HWConfig|*	C269117ED632514887B2DF1E46A2D79B	LENOVO 81JR 8005MB	4/10/2023 4:25:57 PM	4/10/2023 3:19:00 PM	3.09	1308.97	2300
15125	HWConfig|*	DA37ED0CAA1B18DF949D65EFFB045595	DA37ED0CAA1B18DF949D65EFFB045595	1/30/2023 11:03:41 PM	2/2/2023 12:01:05 AM	3.08	278.78	557
15118	HWConfig|*	A2DEF09ABDF5A635BCF6326336BDD587	LENOVO 81JR 8005MB	4/10/2023 4:41:34 PM	4/27/2023 9:45:03 PM	1.71	687.28	1912
15121	HWConfig|*	5C7EE5B718A489809AFEAC7734E187A9	LENOVO 81JR 8005MB	11/10/2022 6:09:33 PM	11/19/2022 4:34:36 AM	1.68	389.96	1552
15119	HWConfig|*	DECE59D46DE8E7BB8840F18CAC191AB1	LENOVO 81JR 8005MB	3/21/2023 10:21:35 PM	4/5/2023 5:04:50 PM	1.66	1560.03	3430
15306	HWConfig|*	84F1772A997CC8EAB4B741C1EA700E11	Dell Inc. Inspiron 14 7420 2-in-1 16068MB	4/17/2023 2:59:40 PM	5/17/2023 9:37:24 PM	1.02	636.49	3551

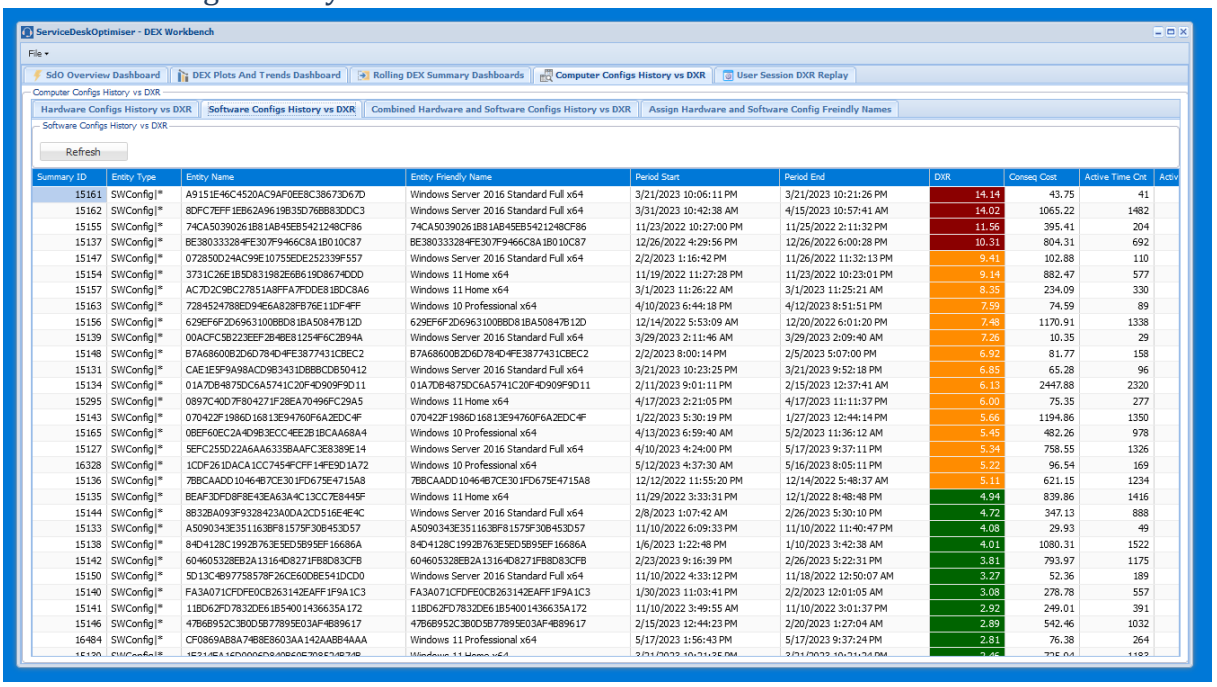
The Hardware Configs History vs DXR Dashboard has the following sections:

- Hardware Configs History vs DXR Controls
  - Refresh – Refresh display
- Hardware Configs History vs DXR Table

  The list of Hardware Config Hash Values in descending DXR order

  - Entity Type – Usually “HWConfig|*” to select the rolling DXR values for all hardware configs identified by its hash value
  - Entity Name – The hash value of the hardware config
  - Friendly Name – The friendly name of the hardware config, if one has been assigned
  - Period Start – The first time a DXR value was included in the rolling summary
  - Period End – The last time a DXR value was included in the rolling summary
  - DXR – The overall DXR value for the hardware config
  - Consequential Cost – A estimate of the consequential cost of the total User Wait Times (Typically calculated at $1000/hour)

Software Configs History vs DXR



Summary ID	Entity Type	Entity Name	Entity Friendly Name	Period Start	Period End	DXR	Conseq Cost	Active Time Cnt	Activ
15161	SWConfig|*	A9151E46C4520AC9AF0EE8C38673D67D	Windows Server 2016 Standard Full x64	3/21/2023 10:06:11 PM	3/21/2023 10:21:26 PM	14.14	43.75	41	
15162	SWConfig|*	8DFC7EFF1EB62A9619B35D76BB83DDC3	Windows Server 2016 Standard Full x64	3/31/2023 10:42:38 AM	4/15/2023 10:57:41 AM	14.02	1065.22	1482	
15155	SWConfig|*	74CA50390261B81AB45EB5421248CF86	74CA50390261B81AB45EB5421248CF86	11/23/2022 10:27:00 PM	11/25/2022 2:11:32 PM	11.56	395.41	204	
15137	SWConfig|*	BE380333284FE307F9466C8A1B010C87	BE380333284FE307F9466C8A1B010C87	12/26/2022 4:29:56 PM	12/26/2022 6:00:28 PM	10.31	804.31	692	
15147	SWConfig|*	072850D24AC99E10755EDE252339F557	Windows Server 2016 Standard Full x64	2/2/2023 1:16:42 PM	11/26/2022 11:32:13 PM	9.41	102.88	110	
15154	SWConfig|*	3731C26E1B5D831982E6B619D8674DDD	Windows 11 Home x64	11/19/2022 11:27:28 PM	11/23/2022 10:23:01 PM	9.14	882.47	577	
15157	SWConfig|*	AC7D2C9BC27851A8FFA7FDDE81BDC8A6	Windows 11 Home x64	3/1/2023 11:26:22 AM	3/1/2023 11:25:21 AM	8.35	234.09	330	
15163	SWConfig|*	7284524788ED94E6A828FB76E11DF4FF	Windows 10 Professional x64	4/10/2023 6:44:18 PM	4/12/2023 8:51:51 PM	7.59	74.59	89	
15156	SWConfig|*	629EF6F2D6963100B8D81BA50847B12D	629EF6F2D6963100B8D81BA50847B12D	12/14/2022 5:53:09 AM	12/20/2022 6:01:20 PM	7.48	1170.91	1338	
15139	SWConfig|*	00ACFC5B223EEF2B4BE8125F6C2B94A	Windows Server 2016 Standard Full x64	3/29/2023 2:11:46 AM	3/29/2023 2:09:40 AM	7.26	10.35	29	
15148	SWConfig|*	B7A68600B2D6D784D4FE3877431CBEC2	B7A68600B2D6D784D4FE3877431CBEC2	2/2/2023 8:00:14 PM	2/5/2023 5:07:00 PM	6.92	81.77	158	
15131	SWConfig|*	CAE1E5F9A98ACD9B3431DBBBCDB50412	Windows Server 2016 Standard Full x64	3/21/2023 10:23:25 PM	3/21/2023 9:52:18 PM	6.85	65.28	96	
15134	SWConfig|*	01A7DB4875DC6A5741C20F4D909F9D11	01A7DB4875DC6A5741C20F4D909F9D11	2/11/2023 9:01:11 PM	2/15/2023 12:37:41 AM	6.13	2447.88	2320	
15295	SWConfig|*	0897C40D7F804271F28EA70496FC29A5	Windows 11 Home x64	4/17/2023 2:21:05 PM	4/17/2023 11:11:37 PM	6.00	75.35	277	
15143	SWConfig|*	070422F1986D16813E94760F6A2EDC4F	070422F1986D16813E94760F6A2EDC4F	1/22/2023 5:30:19 PM	1/27/2023 12:44:14 PM	5.66	1194.86	1350	
15165	SWConfig|*	0BEF60EC2A4D9B3ECC4EE2B1BCAA68A4	Windows 10 Professional x64	4/13/2023 6:59:40 AM	5/2/2023 11:36:12 AM	5.45	482.26	978	
15127	SWConfig|*	5EFC255D22A6AA6335BAAFC3E8389E14	Windows Server 2016 Standard Full x64	4/10/2023 4:24:00 PM	5/17/2023 9:37:11 PM	5.34	758.55	1326	
16328	SWConfig|*	1CDF261DACA1CC745FCFF14FE9D1A72	Windows 10 Professional x64	5/12/2023 4:37:30 AM	5/16/2023 8:05:11 PM	5.22	96.54	169	
15136	SWConfig|*	7BBCAADD10464B7CE301FD675E4715A8	7BBCAADD10464B7CE301FD675E4715A8	12/12/2022 11:55:20 PM	12/14/2022 5:48:37 AM	5.11	621.15	1234	
15135	SWConfig|*	BEAF3DFD8F8E43EA63A4C13CC7E8445F	Windows 11 Home x64	11/29/2022 3:33:31 PM	12/1/2022 8:48:48 PM	4.94	839.86	1416	
15144	SWConfig|*	8B32BA093F9328423A0DA2CD516E4E4C	Windows Server 2016 Standard Full x64	2/8/2023 1:07:42 AM	2/26/2023 5:30:10 PM	4.72	347.13	888	
15133	SWConfig|*	A5090343E351163BF81575F30B453D57	A5090343E351163BF81575F30B453D57	11/10/2022 6:09:33 PM	11/10/2022 11:40:47 PM	4.08	29.93	49	
15138	SWConfig|*	84D4128C1992B763E5ED5B95EF16686A	84D4128C1992B763E5ED5B95EF16686A	1/6/2023 1:22:48 PM	1/10/2023 3:42:38 AM	4.01	1080.31	1522	
15142	SWConfig|*	604605328EB2A13164D8271FB8D83CFB	604605328EB2A13164D8271FB8D83CFB	2/23/2023 9:16:39 PM	2/26/2023 5:22:31 PM	3.81	793.97	1175	
15150	SWConfig|*	5D13C4B977585578F26CE60DBE541DCD0	Windows Server 2016 Standard Full x64	11/10/2022 4:33:12 PM	11/18/2022 12:50:07 AM	3.27	52.36	189	
15140	SWConfig|*	FA3A071CFDFE0CB263142EAFF1F9A1C3	FA3A071CFDFE0CB263142EAFF1F9A1C3	1/30/2023 11:03:41 PM	2/2/2023 12:01:05 AM	3.08	278.78	557	
15141	SWConfig|*	11BD62FD7832DE61B540014366354172	11BD62FD7832DE61B540014366354172	11/10/2022 3:49:55 AM	11/10/2022 3:01:37 PM	2.92	249.01	391	
15146	SWConfig|*	47B6B952C3B0D5B77895E03AF4B89617	47B6B952C3B0D5B77895E03AF4B89617	2/15/2023 12:44:23 PM	2/20/2023 1:27:04 AM	2.89	542.46	1032	
16484	SWConfig|*	CF0869AB8A74B8E8603AA142AABB4AAA	Windows 11 Professional x64	5/17/2023 1:56:43 PM	5/17/2023 9:37:24 PM	2.81	76.38	264	

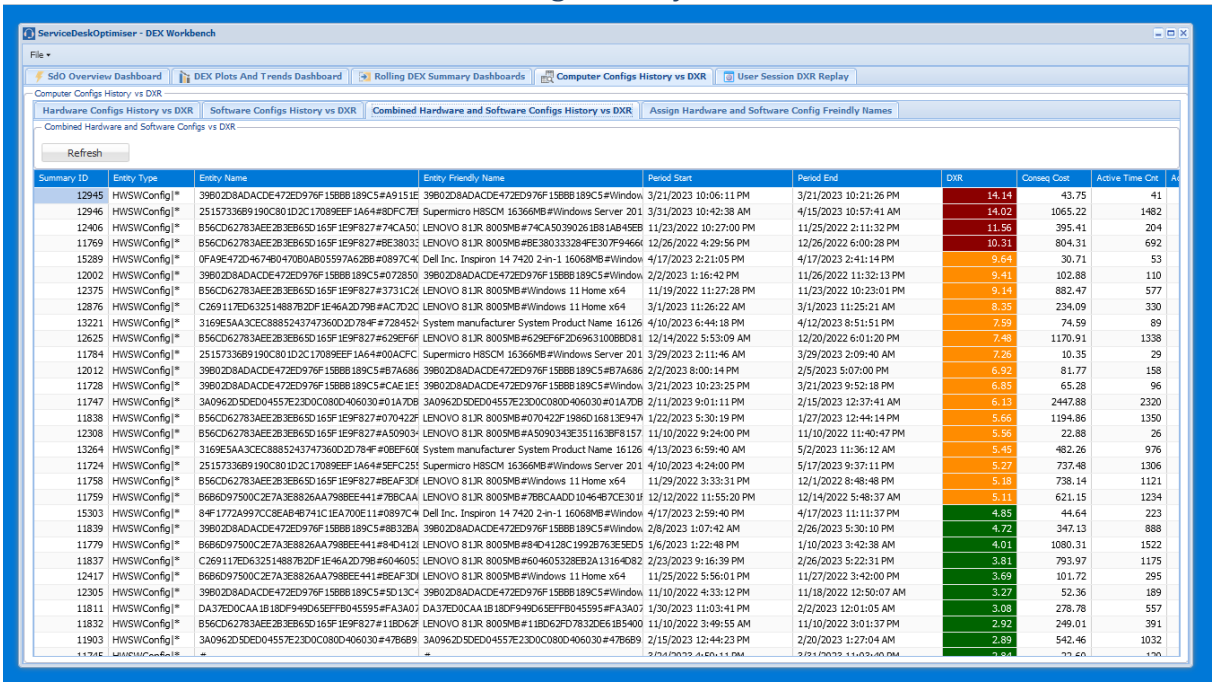
The Software Configs History vs DXR Dashboard has the following sections:

- Software Configs History vs DXR Controls
  - Refresh – Refresh display
- Software Configs History vs DXR Table

  The list of Software Config Hash Values in descending DXR order

  - Entity Type – Usually “SWConfig|*” to select the rolling DXR values for all software configs identified by its hash value
  - Entity Name – The hash value of the software config
  - Friendly Name – The friendly name of the software config, if one has been assigned
  - Period Start – The first time a DXR value was included in the rolling summary
  - Period End – The last time a DXR value was included in the rolling summary
  - DXR – The overall DXR value for the software config
  - Consequential Cost – A estimate of the consequential cost of the total User Wait Times (Typically calculated at $1000/hour)

Combined Hardware and Software Configs History vs DXR



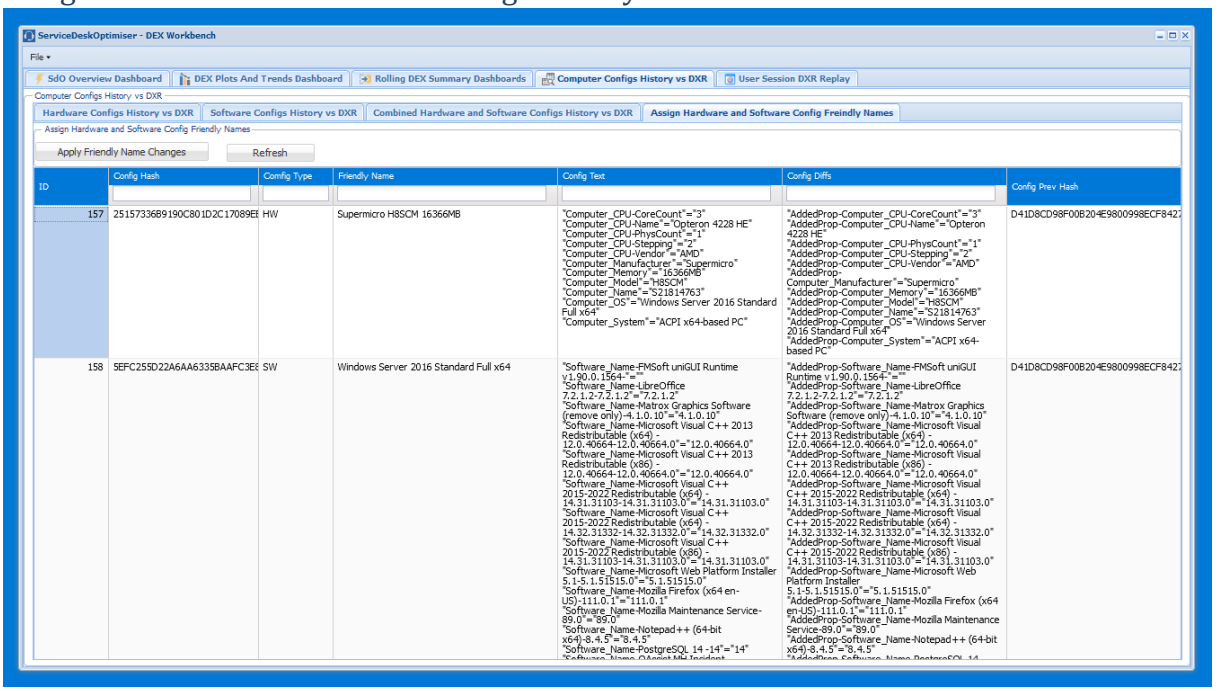
The Hardware and Software Configs History vs DXR Dashboard has the following sections:

- Hardware and Software Configs History vs DXR Controls
  - Refresh – Refresh display
- Hardware Software Configs History vs DXR Table

  The list of combined Hardware and Software Config Hash Values in descending DXR order

  - Entity Type – Usually “HWSWConfig|*” to select the rolling DXR values for all combined hardware and software configs identified by their hash values
  - Entity Name – The hash value of the hardware and software config
  - Friendly Name – The friendly name of the hardware and software config, if one has been assigned
  - Period Start – The first time a DXR value was included in the rolling summary
  - Period End – The last time a DXR value was included in the rolling summary
  - DXR – The overall DXR value for the combined hardware and software config
  - Consequential Cost – A estimate of the consequential cost of the total User Wait Times (Typically calculated at $1000/hour)

Assign Hardware and Software Config Friendly Names



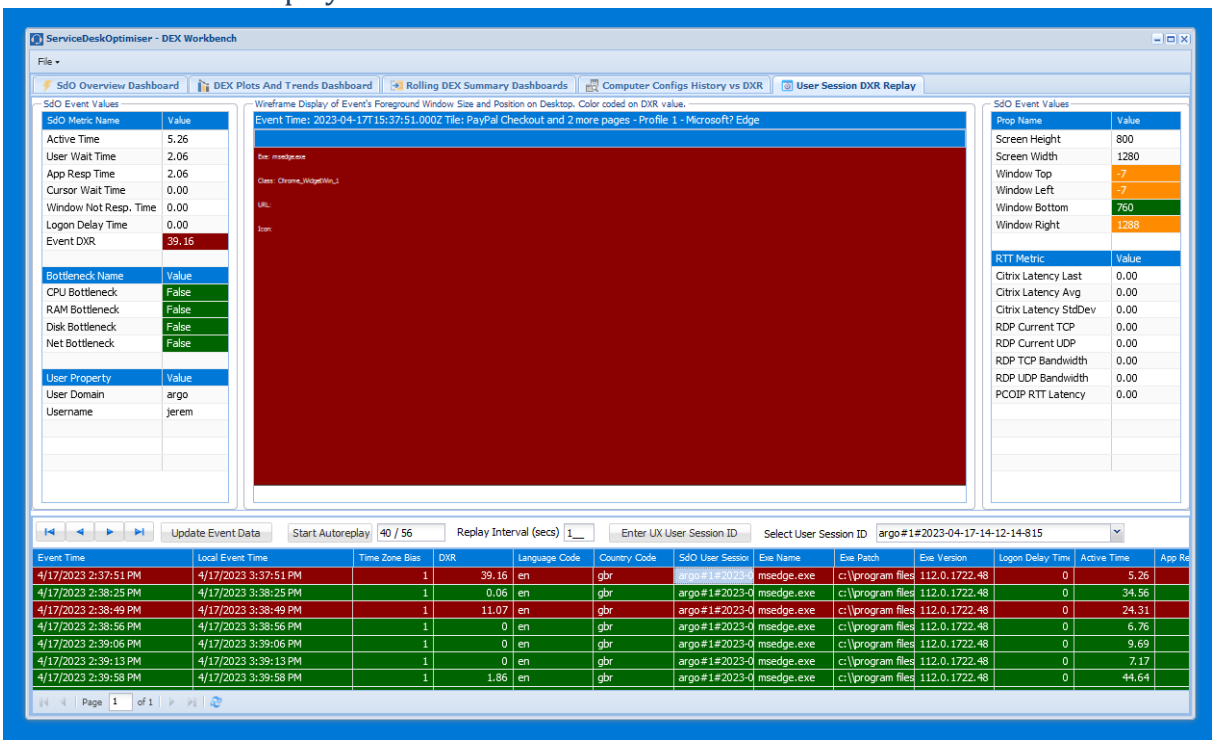
The Assign Hardware and Software Config Friendly form, as the name suggests, is used to assign short, friendly names to long, complex hardware and software configurations to ease the identification of those configurations and their associated DXR value. SdO will automatically assign Friendly Names to configurations as follows:

- Hardware configurations: Manufacturer Name + Model Name + Memory (RAM) Size
- Software configurations: OS Name and Version

The Assign Hardware and Software Config Friendly Name form has the following sections:

- Controls
    1. Apply Friendly Name Changes – Update the summary dataset with Friendly Change changes
    2. Refresh – Refresh display
- Assign Hardware and Software Config Friendly Names Table - Column names:
    1. Config Hash
    2. Config Type
    3. Friendly Name – This field can be modified by support staff as required
    4. Config Text
    5. Config Diffs
    6. Config Prev Hash

User Session DXR Replay Form



The User Session DXR Replay form provides support staff with a deep-dive view of a user's session to pinpoint and understand sequences of poor user experience (aka Digital Experience or DEX) identified by DXR values greater than 10 and displayed in RED. Degraded DXR values (between 5 and 10) and objects are displayed in AMBER and good DEX values (under 5) and objects in GREEN. Support staff can step through each DEX event which is essentially a "user active" block of time, held in the Active Time field. The DXR value for the event is calculated as the events User Wait Time divided by Active Time multiplied by 100 to represent the ratio of wait time to active time as a percentage. As each event becomes the "current" event, the following happens:

- significant (useful) fields of the 'current' event are displayed as name, value pairs in panels to the left and right of the form. The Window Top, Left, Bottom and Right values are coloured coded as:
    1. If both Left and Right points are visible on the desktop = Green
    2. If one of the Left or Right points are invisible = Amber
    3. If both Left and Right points are invisible = Red
    4. If both Top and Bottom points are visible on the desktop = Green
    5. If one of the Top or Bottom points are invisible = Amber
    6. If both Top and Bottom points are invisible = Red
    7. Note: if all values are Red the Foreground Window is not at all visible to the user, if all values are Green the Foreground Window is completely visible to the user
- the background of the current event row in the table and is colour coded on the DXR value (see above for how DXR values are colour coded)
- a wireframe representation of the foreground window is displayed on the "desktop" depiction in the middle of the form and colour code on the events DXR value. Note: the reason for using a wireframe representation, rather than a screenshot, of the foreground window is twofold:
    1. The main reason is privacy so that confidential inform contained in a screenshot is not accidentally leaked.
    2. Screenshots as a lot more storage than wireframe coordinates.

The User Session DXR Replay form has the following sections:

- Left Panels – Name/Value pairs of the current DEX event

- Middle Panel – Depiction of the user's desktop to simulate the position of the current foreground window
- Right Panels – Name/Value pairs of the current DEX event
- Bottom Panels:

    1. Controls:

        1. User session event navigation buttons:

            1. Start – move to start of user session events
            2. Left – move to previous event
            3. Right – move to next event
            4. End – move to end of user session events

        2. Update event data – collect any new events for the current user session
        3. Start Autoreplay – automatically navigates through the events of the current user session at 1 second per event (default)
        4. Current event number indicator - [Event No/No of Events]
        5. Replay Interval (secs) – Set to 1 second by default
        6. Enter UX Session ID – Displays a popup dialog to allow support staff to enter a new User Session ID. Note: The typical use of this control is to input the User Session ID provided from a user using the SdOSessionIDDisplay.exe utility.
        7. Select User Session ID – Allows support staff to select a different User Session ID from a drop-down list.

    2. User Session Event Table

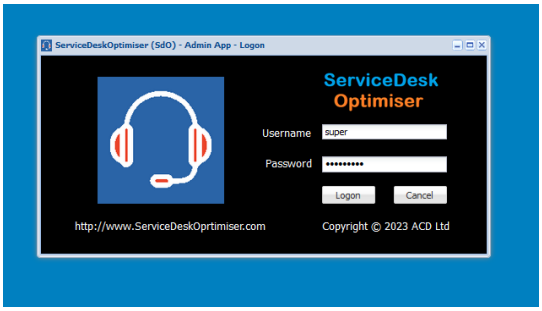
        1. User Session Event Fields…
        2. Event Time – Time in UTC
        3. Local Event Time
        4. Time Zone Bias – Time zone offset in hours
        5. DXR
        6. Language Code – e.g. EN for English
        7. Country Code – e.g. GBR for UK
        8. SdO User Session ID
        9. Exe Name
        10. Exe Path
        11. Exe Version
        12. Logon Delay Time
        13. Active Time
        14. Etc…

SdO Admin App User Guide

SdO Admin App is a web-based application that is the primary administration interface for SdO. Capabilities include:

- SdO Configuration in the following 7 sections:
  - Alerts Config.
  - Summary Config
  - Recipient Config.
  - Report Config.
  - Server Config.
  - Endpoint Config.
  - Bulk Export Config.
  - SdO Setup and License (“super” username only)
  - Raw DEX Event Data Viewer

SdO Admin App Logon Form



SdO Admin App is invoked in a browser using the following URL:

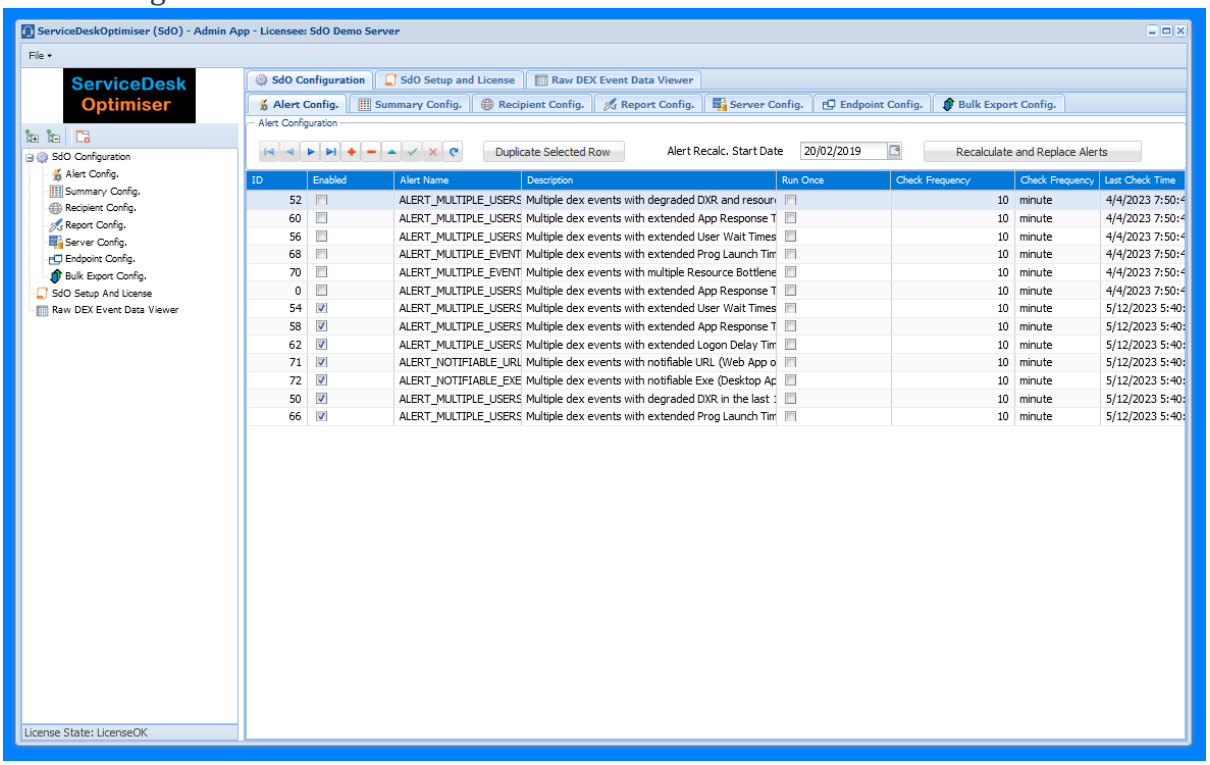
https://data.servicedeskoptimiser.com:8077

The default logon credentials are:

Username: super (or admin)
Password: superlock (or adminlock)

Click on the Logon button to log on. The difference between the Super and Admin usernames is that Super username make the License form visible.

Alert Config Form

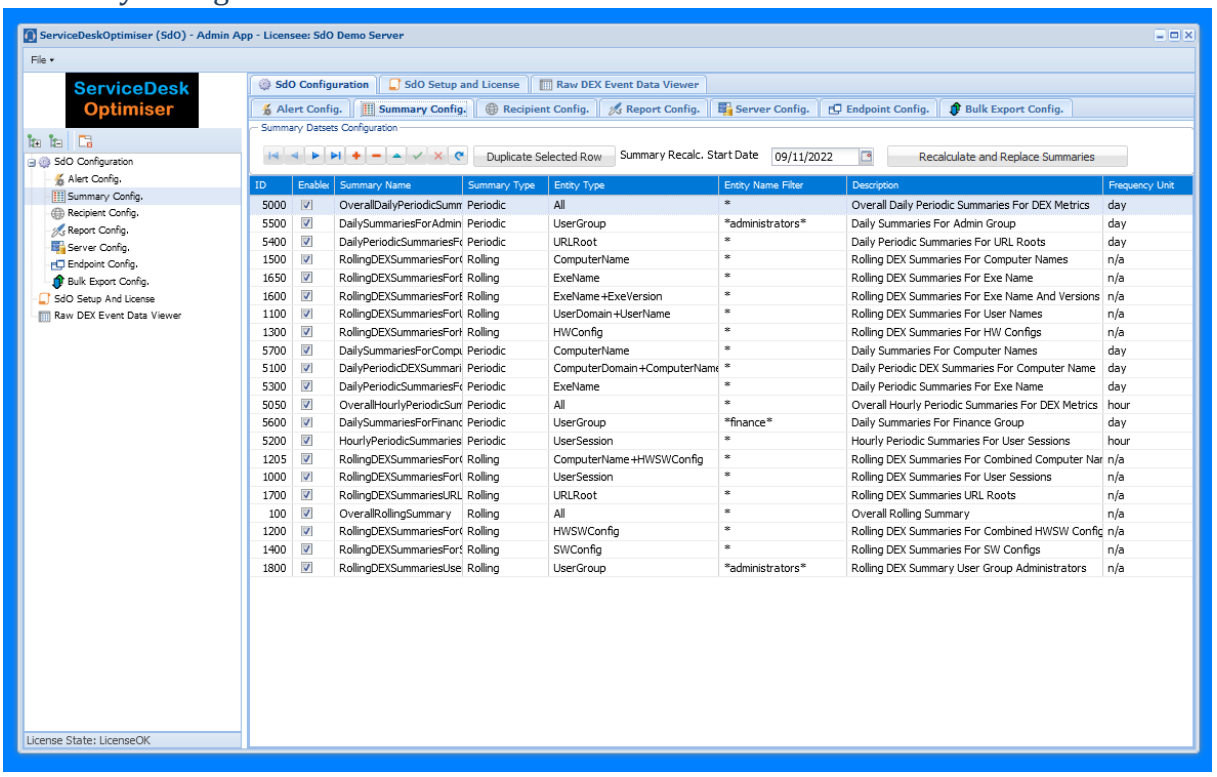


The Alert Config. Form is used to define alerts in SdO based on DXR values and the numbers of user sessions that are being affected over a 10-minute (default) time period. An alert definition can be assigned a Severity Level between 1 and 5, where 5 is the most severe level, but SdO also calculates a Triage Score, between 1 and 5, partly based on the alerts Severity Level, but also the number of different users affected in the same way, at the same time, and the number of different desktop and web applications affected.

The Alert Config. Form has the following sections:

- Controls
    1. Table Data Navigator
    2. Duplicate Selected Row
    3. Alert Recalc. Start Date
    4. Recalculate and Replace Alerts
- Alert Configuration Table - The Alert Configuration Table has the following columns:
    1. Enabled
    2. Alert Name
    3. Description
    4. Run Once
    5. Check Frequency
    6. Check Frequency Unit
    7. Last Check Time
    8. Check SQL
    9. Action SQL
    10. Alert Event Count Threshold
    11. Alert Severity Level

Summary Config Form



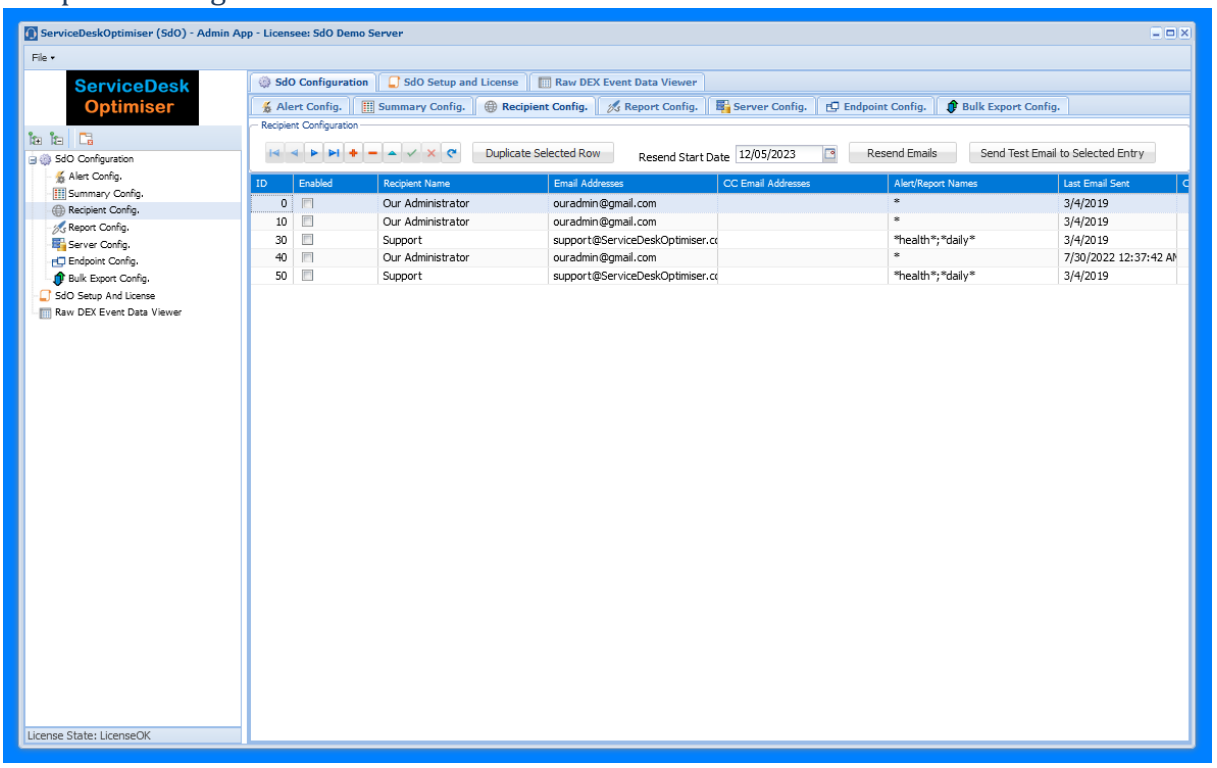
The Summary Config. Form is used to define Summary Datasets of the DEX Event Data DB table. There are two basic types of summaries:

- Periodic Summaries – DEX events values are grouped into consecutive time periods or “buckets” (For example: This type of summary is useful for plotting trend charts)
- Rolling Summaries – continuously calculated as new DEX event values arrive (For example: This type of summary is useful for keeping running totals for how long different desktops are actively in use for Active App Inventory reports)

The Summary Config. Form has the following sections:

- Controls
    1. Table Data Navigator
    2. Duplicate Selected Row
    3. Summary Recalc. Start Date
    4. Recalculate and Replace Summaries
- Summary Configuration Table - The Summary Configuration Table has the following columns:
    1. Enabled
    2. Summary Name
    3. Summary Type
    4. Entity Type
    5. Entity Name Filter
    6. Description
    7. Frequency Unit
    8. Period Start Time
    9. Period End Time
    10. Use Local Time
    11. Execution Count

Recipient Config Form

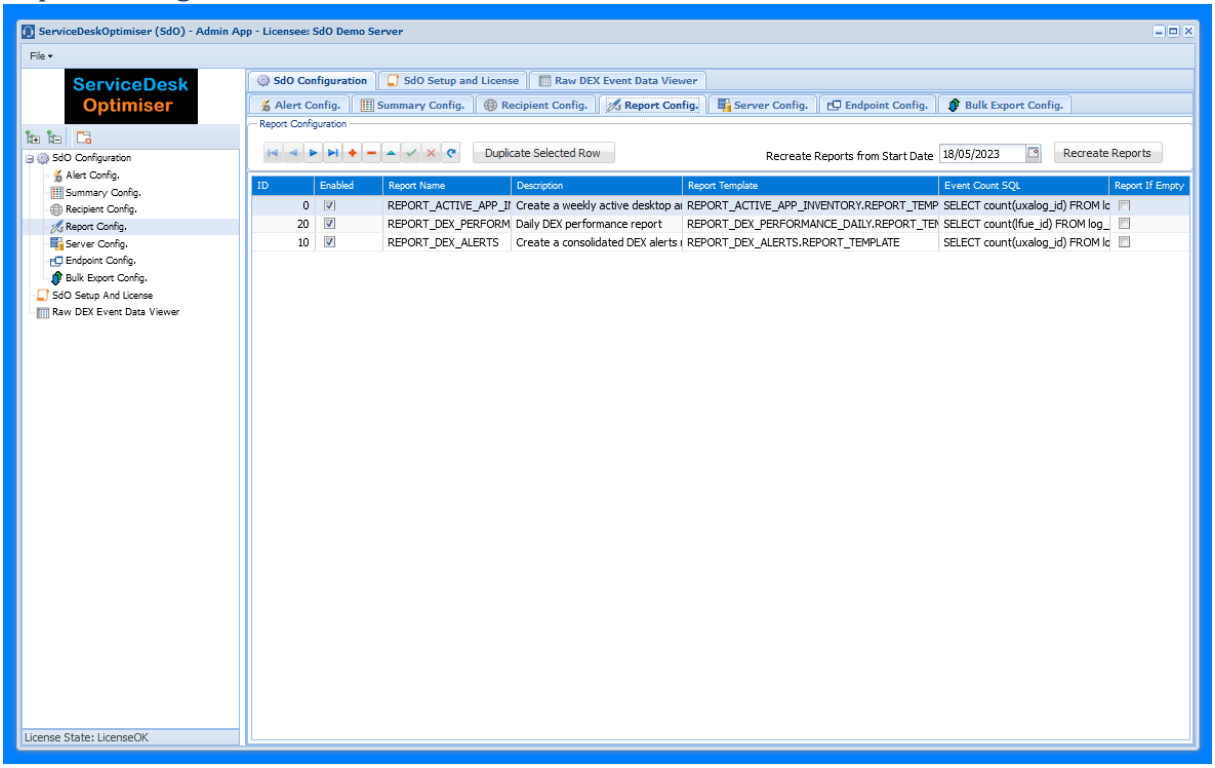


The Recipient Config. Form is used to define the designated recipients of SdO Alerts and Reports.

The Recipient Config. Form has the following sections:

- Controls
    1. Table Data Navigator
    2. Duplicate Selected Row
    3. Resend Emails Start Date
    4. Resend Emails
- Recipient Configuration Table - The Recipient Configuration Table has the following columns:
    1. Enabled
    2. Recipient Name
    3. Email Addresses
    4. CC Email Addresses
    5. Alert/Report Names
    6. Last Email Sent

Report Config Form

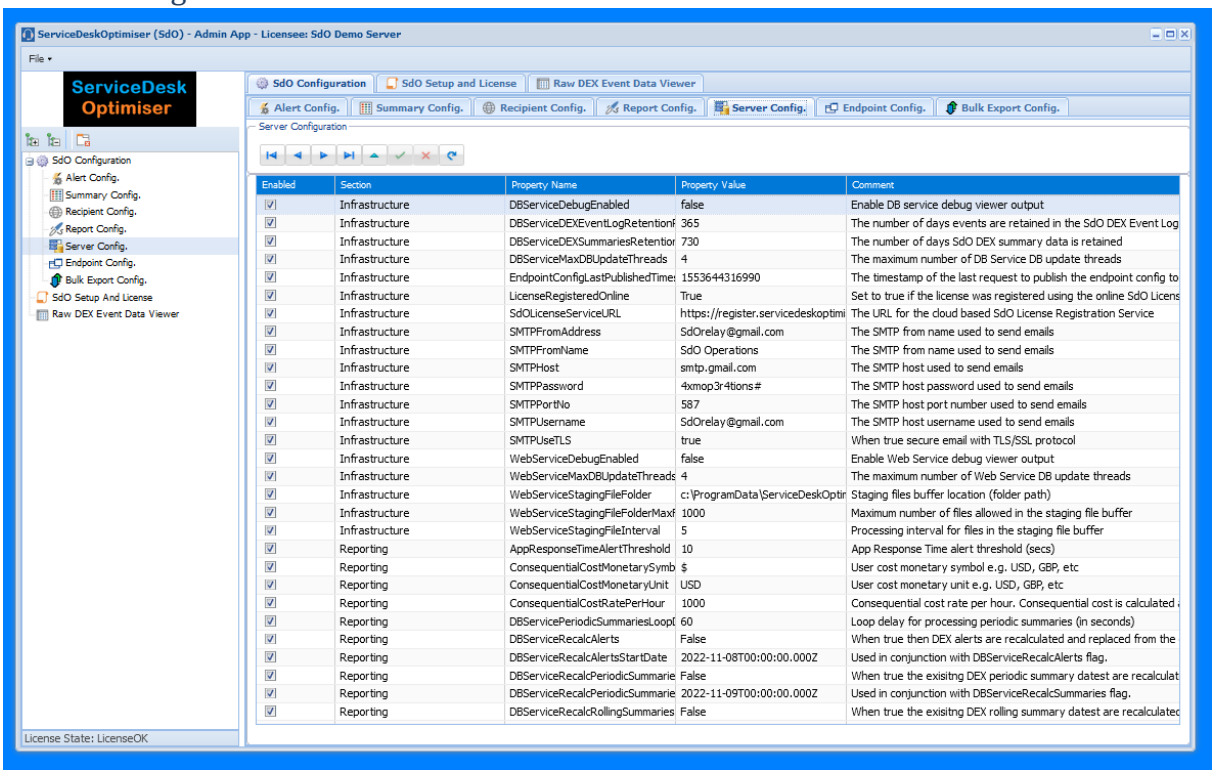


The Report Config. Form is used to define SdO reports based on the result sets of SQL queries which are formatted as HTML documents. Note: The built-in SdO report configurator is a basic out-of-the-box, table-based report definition capability for formatting alerts and reports for basic reporting requirements, other third-party report-writers are recommended for more complex reporting requirements.

The Report Config. Form has the following sections:

- Controls
    1. Table Data Navigator
    2. Duplicate Selected Row
    3. Recreate Reports Start Date
    4. Recreate Reports
- Report Configuration Table - The Report Configuration Table has the following columns:
    1. Enabled
    2. Report Name
    3. Description
    4. Report Template
    5. Event Count SQL
    6. Report if Empty
    7. Run Once
    8. Check Frequency
    9. Check Frequency Unit

Server Config Form

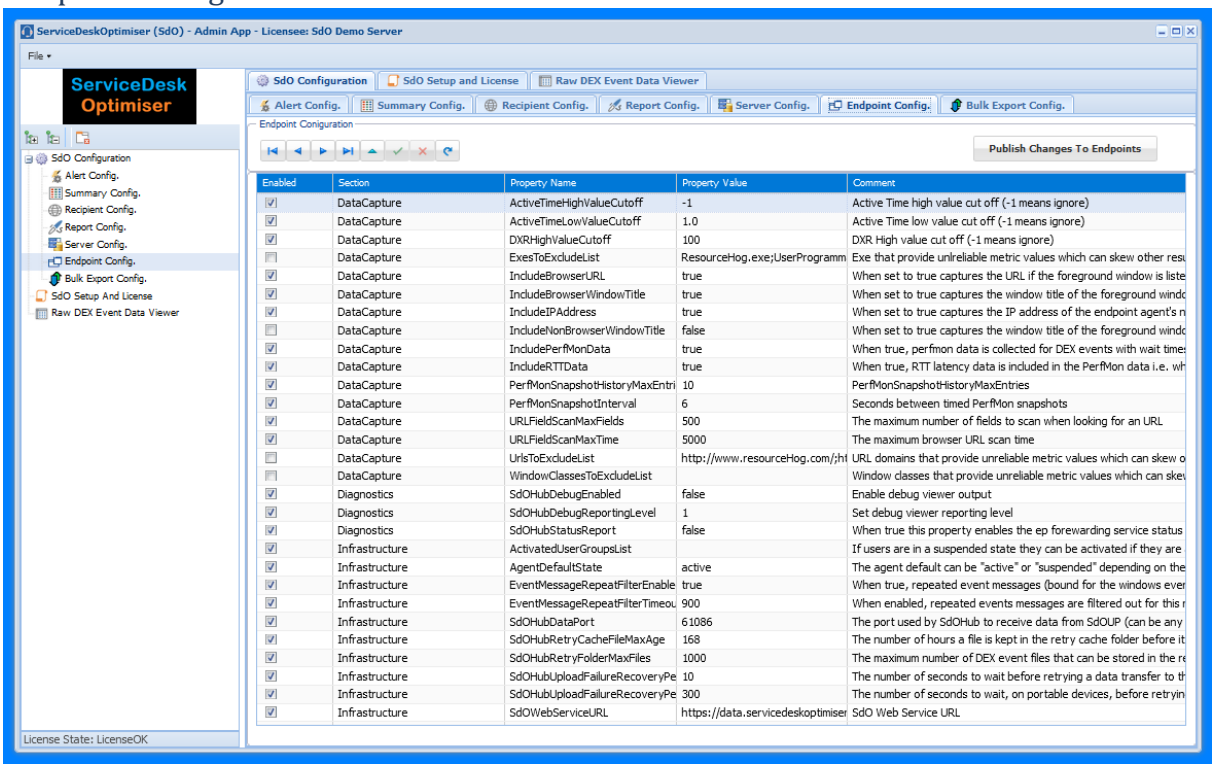


The Server Config. Form is used to specify the SdO Server operational parameters/properties which are defined as name/value pairs.

The Server Config. Form has the following sections:

- Controls
    1. Table Data Navigator
- Server Configuration Table - The Server Configuration Table has the following columns:
    1. Enabled
    2. Section
    3. Property Name
    4. Property Value
    5. Comment

Endpoint Config Form

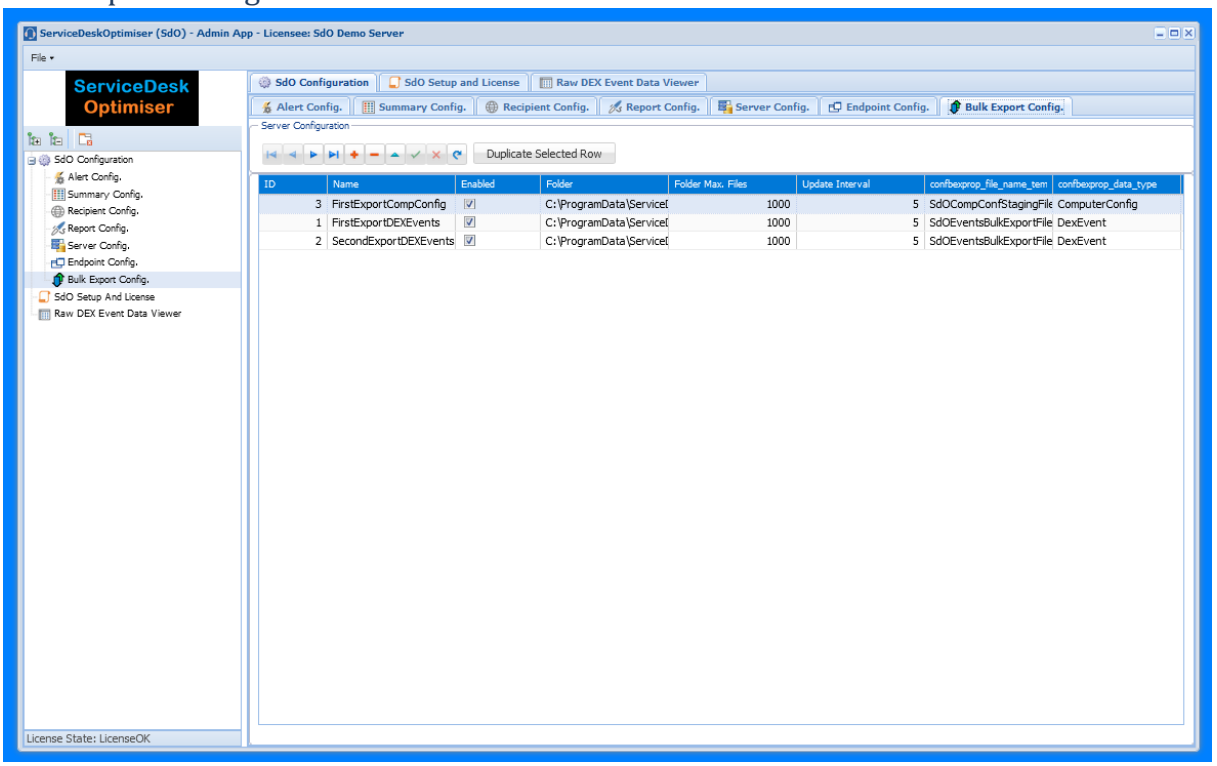


The Endpoint Config. Form is used to specify the SdO Endpoint operational parameters/properties which are defined as name/value pairs.

The Endpoint Config. Form has the following sections:

- Controls
    1. Table Data Navigator
- Endpoint Configuration Table - The Endpoint Configuration Table has the following columns:
    1. Enabled
    2. Section
    3. Property Name
    4. Property Value
    5. Comment

Bulk Export Config Form

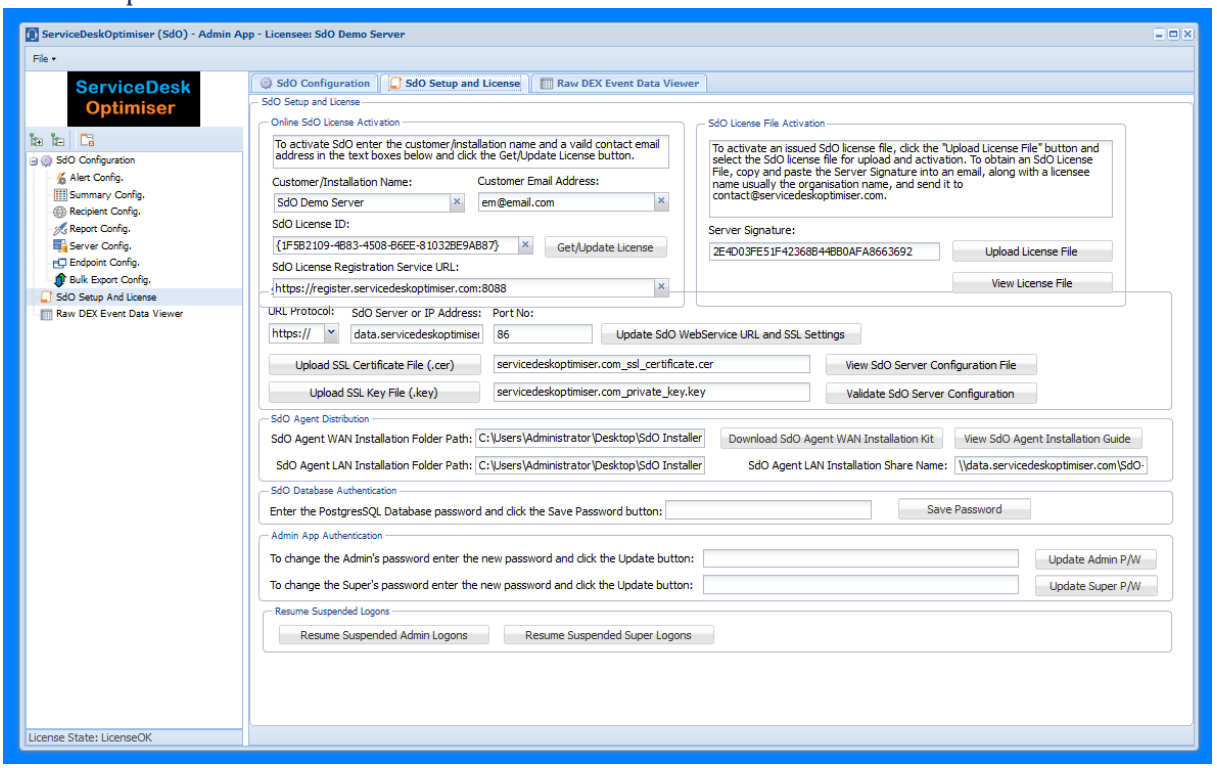


The Bulk Export Config. Form is used to specify the SdO Bulk Export configuration. Bulk Export takes the SdO raw data and

The Bulk Export Config. Form has the following sections:

- Controls
    1. Table Data Navigator
- Bulk Export Configuration Table - The Bulk Export Configuration Table has the following columns:
    1. Name
    2. Enabled
    3. Folder
    4. Folder Max. Files
    5. Update Interval
    6. File Name Template
    7. Data Type
    8. Data Format

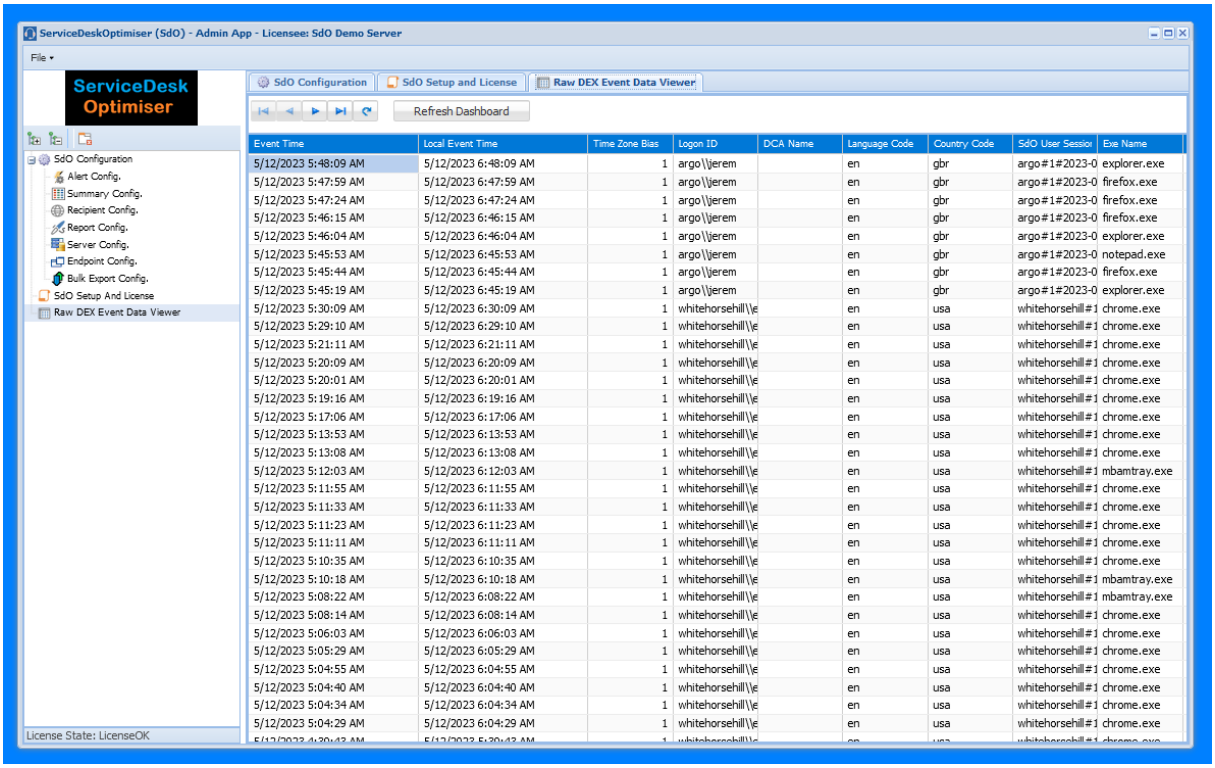
SdO Setup and License



The SdO Setup and License form is used for managing:

- SdO licensing
- HTTPS/SSL files
- SdO Agent Distribution
- SdO Database Authentication
- Admin App Authentication
- Resuming Suspended Logons

Raw DEX Event Data Viewer



The Raw DEX Event Data Viewer is used to verify the collection of data by the SdO Endpoints e.g. after installation to validate the deployment of the SdO Endpoints.

The Raw DEX Event Data Viewer has the following sections:

- Controls
    1. Table Data Navigator
    2. Refresh Dashboard
- Raw DEX Event Data Table - The Raw DEX Event Data Table has the following columns:
    1. Event Time
    2. Local Event Time
    3. Time Zone Bias
    4. Logon ID
    5. Language Code
    6. Country Code
    7. SdO User Session ID
    8. Exe Name
    9. Etc…

End of Document