SofTrack

Managed Assets: Auditing and Activity Platform

for Microsoft Windows



Administrator's Guide



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Welcome to the most advanced enterprise software audit and reporting platform for Windows networks. With SofTrack Managed Assets you can audit and manage software usage on all your Windows desktops, thin clients (including Citrix desktops).

SofTrack employs two main components, the SofTrack Server Agent (SSA) and the SofTrack Workstation Software License and Assets Managed (STSLAM) Agent. Together, these agents give you a variety of insights of user behavior and software usage throughout your environment.

SofTrack Managed Assets Overview

SofTrack's Managed Assets (SMA) functionality provides an automated method to automatically record and report all application usage including connecting usage to Applications installed as well as Logon/Logoff activity and workstation hardware and software inventory. Additionally, SMA provides the ability to centrally store records for hardware and software.

Features include:

- o Detection of Application Active vs Idle time
- Detection of Autodesk Named-User and Network License activity
- o Monitoring of User TCP/IP upload/download activity
- o Utilization Intelligence Summary including Suites activity
- Reporting of workstation lock/screen saver activity
- o Tracking of every application a user engages
- Inventory of installed Applications
- o Tagging of Applications by Software Category (customer definable)
- o Inventory of workstation hardware
- o Recording of Logon, Logoff, Lock and Unlock Activity by User
- o Storing of all data in Microsoft's SQL Server®
- o Categorization of data via separate SQL Databases by business unit or, for Managed Service Providers (MSP), by customer
- Ability to import existing SofTrack inventory and usage data into SQL
- Export Reports to Sortable HTML and CSV
- o Workstation Agent provides full data gathering without network connectivity
- Records storage and ability to set Email Reminders for applications and devices (Contract Management)
- o Customizable Dashboards charting activity and inventory data
- o Scheduled Emails of customizable Dashboards, providing timely charts when needed

Benefits

SofTrack's Managed Assets provides assistance in assessing workstation inventory and software installations plus usage.

Solutions include:

- o Always up-to-date workstation inventory
- Where is a specific application installed
- Which application vendors are found across all workstations
- Normalized application vendor details (Manufacturer, Application, Version, Release, Edition)
- Software Category tagging, define your own custom categories and easily assign to applications (self-determined Normalization of any application)
- Workstation asset details (Make, Model, Bios, Serial Number, MAC address, NICs installed, Recent user)
- o Application installation details, date and method of installation, per workstation
- Usage summary per application, number times opened, active time, idle and and total time
- Concurrent usage including timezone adjustment
- User Day reporting of each application started and length of usage per user per day per hour
- o Maximum usage based on concurrent usage
- Idle usage versus active usage
- o Identify how often Applications are used including recent user per workstation
- o Reveal where Microsoft® installation keys are used, finding all workstations using same including Windows O/S and Office applications
- o Discover unused installed applications per workstation
- o Reporting User logon, logoff, lock and unlock activity
- Separately store data per business unit, or for MSP's, per customer; storage unit
 is entitled "entity" and when required, reports can be produced spanning multiple
 entities
- o Directly import existing SofTrack usage data for inclusion in all reporting
- Centralized Records storage for all applications and devices

Licensing

SofTrack's Managed Assets operates independently of SofTrack's other abilities such as license control, software metering and file activity auditing. SofTrack's other abilities rely on the LWA (Local Workstation Agent) and Managed Assets relies on a separate agent, the STSLAM (SofTrack Software License and Asset Management) agent. These agents have been designed to independently operate and can be installed on the same workstation.

The STSLAM agent is licensed per workstation and per Windows® terminal server session. Its licensing is also independent of SofTrack's LWA (and Quick Inventory) licensing. However, there is one exception, if your SofTrack installation includes LWA and/or Quick Inventory licensing, Smart Inventory (via LWA) and Quick Inventory

records can be directly imported to SofTrack's Managed Assets SQL database for inclusion in the reporting provided by Managed Assets. *No separate Managed Assets license is required for importing of existing SofTrack records created by the LWA and Quick Inventory into SQL for reporting.*

The STSLAM agent functions at each user workstation/terminal server in the background and passively records inventory and application usage including tracking of application idle versus active time. This agent stores recorded activity in encrypted journal files that are transmitted via Named Pipes or via TCP/IP to the SofTrack Server Agent (SSA) using a customer-defined TCP/IP Port whenever the agent is able to connect. If the agent is unable to connect via Named Pipes, then TCP/IP will be attempted (requires DNS to resolve the server name provided to is IPv4 address). If unable to connect, the workstation's activity journal files will continue to be created and these files can be manually transferred at any time, for instance, via email to the SofTrack Administrator, and copied to the SSA's log file path for processing by the SSA into SQL.

Once STSLAM activity data is recorded to SQL it becomes immediately available for reporting.

System Requirements – Platforms Supported

SofTrack Server Agent Requirements

- The SofTrack Server Agent (SSA) for Windows can be installed on networks using the following server systems and will operate properly, regardless of the specific server's role. The SSA can be used on the following:
 - Clustered Windows Servers (any version 2008 and later)
 - Windows 2003 64bit
 - Windows 2008/2008R2 (32bit and 64bit)
 - Windows SBS (any version)
 - Windows 2012/2012R2
 - Windows 2016, 2019, 2022
 - Windows Workstation O/S including Win7, Win8, Win10, Win11 (only use Workstation O/S when licensed for 10 or fewer workstations)
 - Any virtualization on the above including Hyper-V and VMware
 - Microsoft's SQL Server (free Express edition or licensed edition) is required.
 - When SSA installed on a Windows Workstation O/S, we recommend a maximum of 10 workstations.

SofTrack Administrator System Requirements

- Windows 7 or later
- Minimum of 64 MB of RAM

SofTrack User System Requirements

SofTrack Managed Assets workstation agent can be used on any of the following operating systems:

• Windows Terminal Servers (including Citrix®)

- Windows 7 (32bit and 64bit)
- Windows 8.x
- Windows 2016, 2019, 2022
- Windows 10, 11
- Any virtualization software, including Hyper-V, App-V and VMware

SofTrack Configuration Components

SofTrack Managed Assets configuration consists of two components:

- o SofTrack Server Agent
- o SofTrack Software License and Assets Managed (STSLAM) Agent.

The STSLAM Agent is installed at each workstation and terminal server. The STSLAM Agent is specifically designed to operate offline and upload data when connected. Collected data is encrypted and can alternatively be manually copied for processing for workstations that are infrequently or never connected to the SofTrack Server Agent.

Implementation Planning Considerations for SofTrack Managed Assets

SofTrack Managed Assets (SMA) has been designed for use on all 32bit and 64bit versions of Windows® workstations starting with Windows 7® including all subsequent versions (i.e. Windows 10 and Windows 11®). The SMA server host supports all 64-bit Windows Server® versions 2008 and later including the latest Windows Server® 2022. A centralized Microsoft® SQL Server is utilized for data storage, the minimum recommended version is 14.0.

There are no specific Windows® workstation configurations required.

The following is regarding recommended server configurations for supporting SMA in customer engagements of varying capacities.

Background

There are two planning considerations for SofTrack Managed Assets (SMA):

- Network and Server(s) configurations sufficient to support the number of actively connected workstations/terminal servers; Note: workstation agent does not require a real-time connection, activity journals can be manually moved without requiring connection
- SQL Server capacity to support the storage of the amount of data collected from the total number of workstations and its ability to process activity into SQL Tables.

SMA utilizes one or more SofTrack Server Agents (SSA) that process workstation activity data into a single SQL Server instance (see <u>Chapter 3</u>). The SMA workstation (STSLAM) Agent is installed via MSI at each required workstation/terminal server and is configured to

connect via TCP/IP (IPv4) to a fixed IPv4 address or via Named Pipes to a specific Windows® server. The STSLAM agent configuration at each workstation can be changed as required, full details in Chapter 4.

The average workstation (or user session on a terminal server) will generate a total 1M-3M of activity data per day. When online with the SofTrack Server Agent, the STSLAM agent will attempt to transmit these activity journals every 15 minutes. During the user workday this would result in an average data transfer of 32KB-100KB once every 15 minutes.

When a STSLAM agent is offline/unable to upload it will continue to attempt until successful. Note: Connection from STSLAM to the SSA is not required; the STSLAM agent *can be always offline* and its activity journals manually moved to the SSA for reporting. The STSLAM activity data, contained in activity journals (files), can alternately be transferred to the SSA by a variety of methods for workstations that are offline from the SSA (reference Chapter 4).

Unless configured to use Named Pipes, the STSLAM agent will initially use TCP/IP Port 3884 when connecting to the SSA, the response from the SSA will indicate the <u>customerdefined TCP/IP Port</u> to use for uploading of gathered user activity. This requires that both Port 3884 upload/download traffic and the customer defined TCP/IP port traffic be allowed to pass through the network without firewall blocking or WAN Accelerator caching. When using Named Pipes, the STSLAM agent will use standard Windows SMB protocols to connect and transfer data.

All activity uploads by the STSLAM agent are "in the background" and the user experience is unaffected by data transfers including any inability to successfully complete transfers.

Implementation recommendations up to 500 workstations

The following are the recommended *minimum* characteristics for the SMA server host when hosting up to 500 STSLAM agents, if the server is hosting other distributed services, these recommendations are in addition to other requirements.

- Dedicated 1Gb Ethernet network adapter
- o 12GB RAM for the SofTrack Server Agent (SSA)
- 16GB RAM for the Microsoft SQL Server® installation (if on same server, SQL Server may be hosted on another server as needed, there is no requirement to place it on the same host)
- o 2GB disk space to store STSLAM activity journals prior to upload to SQL
- o 25GB disk space for SQL Server (average space required per year of activity)
- o Dedicated (2) CPU Cores (non-hyperthreaded) for SofTrack Server Agent
- o May need additional CPU core(s) for SQL Server
- o If using a virtual server, we recommend the ratio of virtualized CPU (vCPU) Cores to physical CPU (pCPU) Cores to not exceed 2:1

Implementation recommendations up to 1000 workstations

The following are the recommended *minimum* characteristics for the SMA server host when hosting up to 1000 STSLAM agents, if the server is hosting other distributed services, these recommendations are in addition to other requirements.

- o Dedicated 1Gb Ethernet dual-port network adapter (load balancing)
- o 16GB RAM for the SofTrack Server Agent
- 16GB RAM for the Microsoft SQL Server® installation (if on same server, SQL Server may be hosted on another server as needed, there is no requirement to place it on the same host)
- o 5GB disk space to store STSLAM activity journals prior to upload to SQL
- o 50GB disk space for SQL Server (average space required per year of activity)
- o Dedicated (4) CPU Cores (non-hyperthreaded) for SofTrack Server Agent
- o May need additional CPU core(s) for SQL Server
- o If using a virtual server, we recommend the ratio of virtualized CPU (vCPU) Cores to physical CPU (pCPU) Cores to not exceed 2:1

Implementation recommendations up to 2000 workstations

The following are the recommended *minimum* characteristics for the SMA server host when hosting up to 2000 STSLAM agents, if the server is hosting other distributed services, these recommendations are in addition to other requirements.

- o Dedicated 1Gb Ethernet quad-port network adapter (load balanced)
- o 24GB RAM for the SofTrack Server Agent
- 24GB RAM for the Microsoft SQL Server® installation (if on same server, SQL Server may be hosted on another server as needed, there is no requirement to place it on the same host)
- o 10GB disk space to store STSLAM activity journals prior to upload to SQL
- o 100GB disk space for SQL Server (average space required per year of activity)
- o Dedicated (4) CPU Cores (non-hyperthreaded) for SofTrack Server Agent
- o May need additional CPU core(s) for SQL Server
- o If using a virtual server, we recommend the ratio of virtualized CPU (vCPU) Cores to physical CPU (pCPU) Cores to not exceed 2:1

Implementation recommendations up to 5000 workstations

The following are the recommended *minimum* characteristics for the SMA server host when hosting up to 5000 STSLAM agents, if the server is hosting other distributed services, these recommendations are in addition to other requirements.

- Dedicated 10Gb Ethernet dual-port network adapter (load balanced) or single-port 25/50Gb Ethernet network adapter with a sufficiently capable network switch
- o 64GB RAM for the SofTrack Server Agent
- o 64GB RAM for the Microsoft SQL Server® installation (if on same server, SQL Server may be hosted on another server as needed, there is no requirement to place it on the same host)
- o 40GB disk space to store STSLAM activity journals prior to upload to SQL
- o 300GB disk space for SQL Server (average space required per year of activity)
- o Dedicated (12) CPU Cores (non-hyperthreaded) for SofTrack Server Agent
- o May need additional CPU core(s) for SQL Server
- o If using a virtual server, we recommend the ratio of virtualized CPU (vCPU) Cores to physical CPU (pCPU) Cores to not exceed 2:1

Implementation recommendations for larger installations

For customer enagagements exceeding 5000 workstations we recommend no more than 5000 STSLAM workstation agents per SofTrack Server Agent (SSA). Due to a centralized/single SQL Server design for activity data storage, multiple SSAs can be utilized to gather data from its assigned workstations and transmit to the centralized SQL Server Host. All SMA Reports will continue to be available as each refer to the single SQL Server host for its data source.

Contacting Integrity Software, Inc.

Help resources for SofTrack include:

- This manual
- E-mail: support@softwaremetering.com
- Telephone: (512) 372-8991, ext 2 (available Monday through Friday, between 4:00 a.m. and 6:00 p.m. U.S. Central Time (GMT-6))



Overview

SofTrack's Server Agent (SSA) processes workstation activity as configured. Configuration is controlled via the SOFTRACK_CONSOLE.EXE interface. The SSA must be installed on at least one server and can be installed on multiple hosts provided each has a license. SSAs share data because all data is permanently stored in at single, centralized Microsoft's SQL Server. Each SSA installed performs the following duties:

- Receives and routes all workstation agent data to SQL Server as directed
- Interacts with SofTrack STSLAM Agents
- Responds to Administrator and user inquiries
- Creates and emails **Dashboard reports** as scheduled

Installation Steps

The remainder of this chapter contains a step-by-step discussion of SofTrack's Server Agent installation, including:

- Installing or upgrading a fully licensed version of SofTrack
- SofTrack's use of the Registry

See Chapter 4 for information about installing SofTrack's Workstation STSLAM Agent.

Installing or Upgrading a Fully Licensed Version of SofTrack

This section describes the procedure for installing a fully licensed version of SofTrack. The procedure is the same whether you are upgrading from a current, an earlier, or an expired version of SofTrack.

Obtaining the Current Version of SofTrack

The current version of SofTrack is always available from:

http://www.softwaremetering.com/outgoing/softrack full.zip

This download and the TOKEN file(s) that you received upon purchase are all that is required for a fully licensed version of SofTrack. This download is internally date-stamped. This date stamp is checked by the TOKEN, which is described in the subsequent section.

NOTE: If your TOKEN's maintenance has expired, you will need to renew your maintenance (signified by receipt of a new TOKEN) before you can actively use

¹ The SSA does not need to be active to for the creation of reports from data it has been previously acquired.

SofTrack for any purpose other than reporting previously obtained data.

NOTE: If an Evaluation TOKEN has been initially used, it will become a "full version" simply by installing the purchase TOKEN(s), the actual SSA file components are identical.

Determining Your Last Date of SofTrack Maintenance

The TOKEN file contains several details regarding your purchase, including your Company Name, Contact Name, Phone Number, and the end of SofTrack maintenance date. The SofTrack product is internally date-stamped with a "Build Date". For the SofTrack product to recognize the TOKEN, this "Build Date" must be before the end-of-maintenance date within the TOKEN. The end of SofTrack maintenance date is usually one year from date of purchase. To determine the "Build Date" of the SofTrack product, view the Build Date file included in the download. To determine the end-of-maintenance date within your TOKEN file, open the xxxxx.tkn file with any text viewer, such as NOTEPAD.EXE.

IMPORTANT: Unless you are using a SofTrack SUBSCRIPTION TOKEN, your right to use the SofTrack product never expires—only your right to receive and use the latest product maintenance and support. You can use the SofTrack product perpetually as long as the "Build Date" of your SofTrack product is before the end-of-maintenance date of your TOKEN. Remember, the end-of-maintenance date of the TOKEN only indicates which releases of SofTrack you are entitled to install and use.

NOTE: You *must* install the TOKEN on every server that hosts an SSA.

Installation: SofTrack Server Agent (SSA)

To install the SofTrack Server Agent on your Windows server, perform the following procedure:

- 1 From a remotely connected workstation or directly at the server, log in with permissions equal to that of the **Administrators Group**. For purposes of installing SofTrack, the account you use must have full access to the Registry of the server to which you install.
- 2 Open SOFTRACK CONSOLE.EXE



- **3** Click the Install Server icon from on the Home tab:
- 4 On the resulting screen (Figure 2-1) Fill in the Name of the Server for SofTrack Installation and Name of Share fields; use the Path Assistance button to fill in both fields. This example uses STLOG as the share path. Note, the share path must already exist, if not, use Windows® Explorer to create a Share for the server hosted path to use. Click Next.

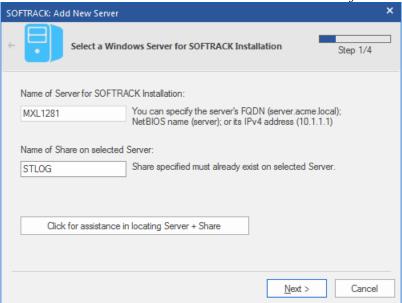


Figure 2-1

5 On the resulting screen (Figure 2-2) Use the Locate Installation License button to complete the Filename of SOFTRACK License File to Install field. Click Next

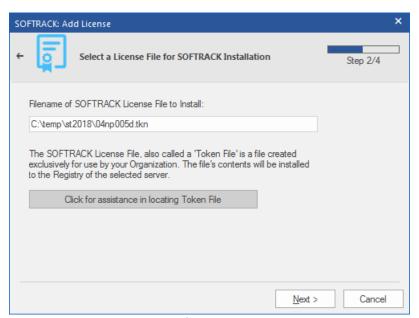


Figure 2-2

6 On the resulting screen (Figure 2-3) confirm the desired installation option. Click **Next**

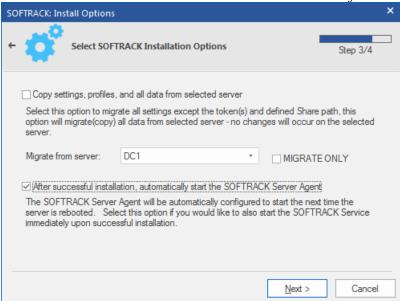


Figure 2-3

7 On the resulting screen (Figure 2-4) verify installation details. Click **Install**

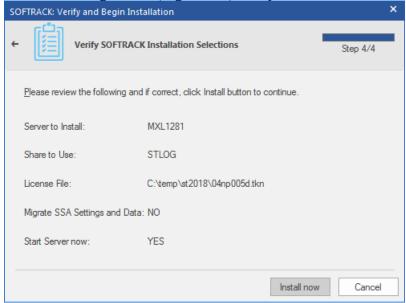
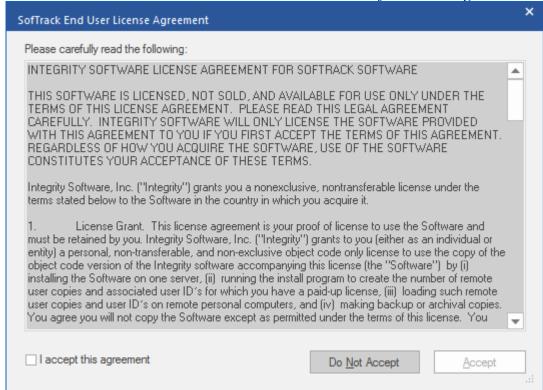


Figure 2-4

If this is the first time SofTrack has been installed, you will be presented with the following End User License Agreement:



Once accepted a progress window such as the one shown in Figure 2-5 will appear:

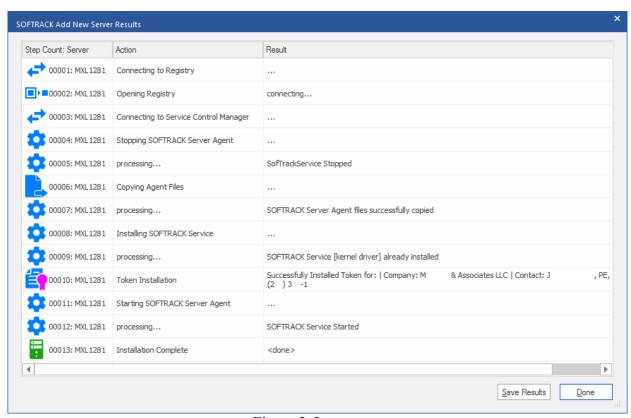


Figure 2-5

Note: The SofTrack Service files are copied to the %SystemRoot%\System32\Drivers directory and on 64bit systems the EXE and DLL files are copied to %SystemRoot%\SysWow64 directory.

When ready, click the "Done" button.

If there were any issues shown, click the "Save Results" button to save the full results and send via email to softwaremetering.com

The installed server will now appear in the Home console window (Figure 2-6).

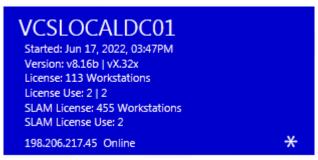
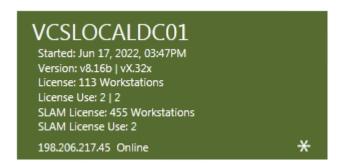
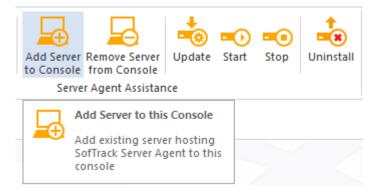


Figure 2-6

If you ever see the same tile in Green (image below) this indicates the named machine is the current machine and was automatically shown because there are no servers added to the console. The list of servers shown is local to your PC where the SofTrack Console is run.



To add a server to the Console, use the console ribbon button Add Server to Console:



Manually Updating the SofTrack Server Agent and Console

The SofTrack Console includes the ability to directly update the SofTrack Server Agent (SSA). When only using SofTrack Managed Assets the SSA can be updated anytime, all workstation agents reporting will automatically delay uploading their data until the SSA is again active. If also using SofTrack License Control, please refer to its update instructions as user activity will be interrupted.

- 1 Select the Home page and Server to update
- 2 Click "Update SofTrack Server Agent (SSA)" button as shown in Figure 2-7



Figure 2-7

3 On the resulting screen (Figure 2-8) select the desired option, click UPDATE.

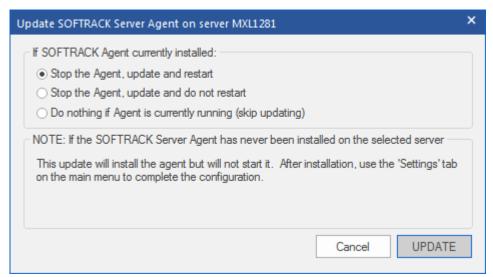
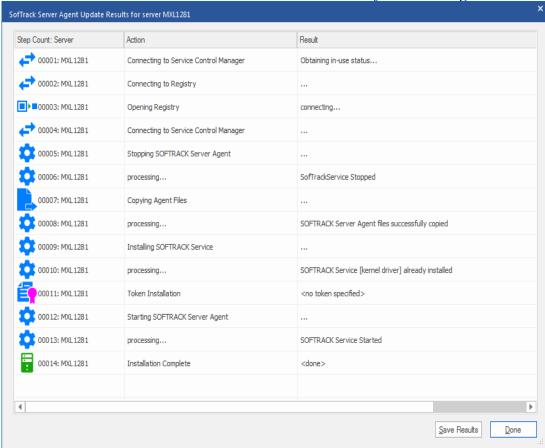


Figure 2-8

4 A progress window will appear:



5 Optionally, once the update is complete you can click on the Start SSA button as shown in Figure 2-9:

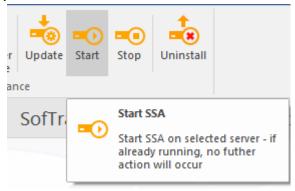


Figure 2-9

SofTrack Server Agent installation is complete.

SofTrack's Use of the Registry on a Windows Server

This section describes how SofTrack uses the Registry on a Windows server.

When SOFTRACK_CONSOLE.EXE connects to a Windows server, it attempts to create the following Registry Key:

HKEY LOCAL MACHINE\Software\Integrity Software, Inc.

Within this Registry Key, a SofTrack key is created. Subordinate to the SofTrack key are several other keys and values.

Installation: Backing up your SofTrack configuration and data

To backup your SofTrack Configuration requires two steps:

- 1. Backup all files located in the STLOG or other Share you defined at the server hosting the SofTrack Server Agent as the **Log File Path (Share)** as shown on the Settings tab when you run the SOFTRACK CONSOLE application.
- 2. Run REGEDIT at the server hosting the SofTrack Server Agent and export the following key:

```
HKEY LOCAL MACHINE\SOFTWARE\Integrity Software, Inc.
```

Together, those two items will complete the backup of your SofTrack Server Agent configuration and data.

Separately, follow Microsoft's instructions to backup data stored in SQL Server®.

SofTrack and Window 64bit Firewall settings

This section describes how SofTrack modifies the Windows Firewall on a Windows 2008 (or later) 64bit server.

When the SofTrack Service starts and it detects it is running on a Windows 2008 64bit server (or later) it will automatically add two monitoring rules to the Windows Firewall:

SOFTRACK64_TCP SOFTRACK64_UDP

These rules open SofTrack Port 3884 to all traffic. This port is used by many components of SofTrack and if not open will prevent SofTrack from properly functioning.

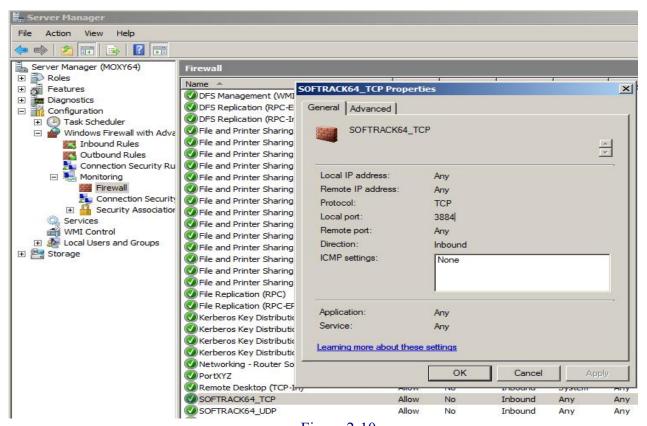


Figure 2-10

WAN Accelerators

If your network includes WAN Accelerators such as those by Riverbed Systems, it critical that "pass through" rules be created for each end of the WAN for IP Port 3884. The SofTrack Server Agent acts as both "server" and "client" so the pass through rules must not cache any TCP/IP packets where the source or destination IP Port is 3884.

All SofTrack Server Agent TCP/IP communications initially occur on port 3884.

Please note that the SofTrack Server Agent has been permanently assigned TCP/IP port 3884 (a decimal number) by the Internet Assigned Numbers Authority, see this link:

http://www.iana.org/assignments/port-numbers

All workstation agent to SofTrack Server Agent TCP/IP communications initially occur on port 3884 and then continue on the port defined when configuring SofTrack Managed Assets, see Chapter 3 for further details. Creation of "pass through" rules for all inbound/output traffic for this customer defined Port are also required.

SofTrack Administrator (SOFTRACK_CONSOLE.EXE)

- 1 Unzip the download (usually softrack_full.zip) with folders (directories) included. Extract to a new directory so none of the old files are included.
- **2** The SofTrack Administrator's files are contained in the root of the folder (directory) you selected for unzipping.
- **3** You can copy these files any preferred location, however, the exact folder (directory) structure must be retained.
 - The file "softrack_console.exe" is the filename to open. It can be used on a workstation that whose user has an administrative logon to the server(s) hosting the SofTrack Server Agent. The softrack console.exe can also be directly used on the server hosting the SofTrack Server Agent.

Server Host Recommendations

BIOS Settings

Set the computer's BIOS to High Performance, with C-states disabled. However, note that this is system and BIOS dependent, and some systems will provide higher performance if the operating system controls power management. You can check and adjust your power management settings from Settings or by using the powercfg command.

For more information, see Powercfg Command-Line Options https://technet.microsoft.com/library/cc748940.aspx

Otherwise, set the "Windows Power Plan" to Maximum or High-Performance. Note, see above, this will not work properly if the system BIOS has been set to disable operating system control of power management.

Many hardware systems use System Management Interrupts (SMI) for a variety of maintenance functions, including reporting of error correction code (ECC) memory errors, legacy USB compatibility, fan control, and BIOS controlled power management.

The SMI is the highest priority interrupt on the system and places the CPU in a management mode, which preempts all other activity while it runs an interrupt service routine, typically contained in BIOS.

Unfortunately, this can result in latency spikes of 100 microseconds or more.

To achieve the lowest latency, please request a BIOS version from your hardware provider that reduces SMIs to the lowest degree possible. These are frequently referred to as "low latency BIOS" or "SMI free BIOS." In some cases, it is not possible for a hardware platform to eliminate SMI activity altogether because it is used to control essential functions (for example, cooling fans).

Note:

The operating system can exert no control over SMIs because the logical processor is running in a special maintenance mode, which prevents operating system intervention.

Hosting in a VMware environment

In addition to the recommendations found in above, if using the SSA on a VMware host, your configuration you may need to dedicate physical network adapter(s) to the SSA host to ensure it has the bandwidth it requires.

For configurations with more than 300 workstations being connected to the SSA and the SSA is hosted within a VMware configuration, we strongly recommend adhering to the recommendations in this document:

https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/techpaper/vmwtuning-latency-sensitive-workloads-white-paper.pdf

And on this following link:

https://docs.microsoft.com/en-us/windows-server/networking/technologies/network-subsystem/net-sub-performance-tuning-nics

Futher improvements include:

- Utilizing Solid State Drives versus spindle disk drives. SSD drives provide significant performance benefits.
- Dedicating physical CPUs to the SSA host, or maintain a virtual CPU to physical CPU ratio of no more than 2:1 to ensure CPU availability for receiving and processing of network packets. Do not include hyperthreaded CPUs in the ratio as they are not equivalent to an entire CPU core. For instance, if your hardware includes 2 sockets (2 physical CPUs) with 12 cores each, that is a total of 24 CPUs. If you have enabled hyperthreading it will then appear to be 48 CPUs, for purposes of the 2:1 ratio only count actual CPU cores not those resulting from enabling hyperthreading.
- Ensure RAM allocated to the VMware guest VM hosting the SSA is not overcommitted by the VMware hypervisor (over sharing of RAM between active guest VMs).
- Ensure RAM within the VM is not overcommitted where "committed bytes" exceeds amount of physical RAM, you can verify this using Windows TaskManager, Performance Tab, Memory section.

Best Practices for Oversubscription of CPU, Memory and Storage in vSphere Virtual Environments:

https://communities.vmware.com/servlet/JiveServlet/previewBody/21181-102-1-28328/vsphee-oversubscription-best-practices[1].pdf

Hosting in a Hyper-V environment

In addition to the recommendations found in above, if using the SSA on a Hyper-V host, your configuration may need to dedicate physical netork adapter(s) to the SSA host to ensure it has the bandwidth it requires.

For configurations with more than 300 workstations being connected to the SSA and the SSA is hosted within a Hyper-V configuration, we strongly recommend adhering to the recommendations in this document:

Please review this link for minimizing potential problems:

https://docs.microsoft.com/en-us/windows-server/administration/performance-tuning/role/hyper-v-server/detecting-virtualized-environment-bottlenecks

This tutorial includes many valuable insights and recommendations:

Hyper V » Tutorials » 6 Hardware Tweaks that will Skyrocket your Hyper-V Performance 6 Hardware Tweaks that will Skyrocket your Hyper-V Performance https://www.altaro.com/hyper-v/hardware-tweaks-hyper-v-performance/

SofTrack Server Agent connectivity troubleshooting

Reviewing SSA host network communication faults

The following is based on this link:

 $\frac{https://docs.microsoft.com/en-us/windows-server/networking/technologies/network-subsystem/net-sub-performance-counters}{}$

The following performance counters are relevant to potential network problems.

Network Interface(*), Network Adapter(*)
Packets Received Discarded
Packets Received Errors
Packets Outbound Discarded
Packets Outbound Errors

WFPv4, WFPv6 Packets Discarded/sec

UDPv4, UDPv6

Datagrams Received Errors

TCPv4, TCPv6 Connection Failures Connections Reset

Network QoS Policy Packets dropped Packets dropped/sec

Per Processor Network Interface Card Activity Low Resource Receive Indications/sec Low Resource Received Packets/sec

Microsoft Winsock BSP Dropped Datagrams Dropped Datagrams/sec Rejected Connections Rejected Connections/sec

Receive Side Coalescing (RSC) performance
The following performance counters are relevant to RSC performance.
Network Adapter(*)
TCP Active RSC Connections
TCP RSC Average Packet Size
TCP RSC Coalesced Packets/sec
TCP RSC Exceptions/sec

https://docs.microsoft.com/en-us/windows-server/networking/technologies/network-subsystem/net-sub-performance-top

The above statistics can be viewed in Windows PERFMON but it can be cumbersome to configure. The following powershell script can assist in gathering these statistics:

https://gallery.technet.microsoft.com/Get-Perfmon-Counter-c6ca9070

Description:

The script located on the link above was initially created to analyse the Packets Received Discarded on multiple Exchange servers. This is due to experiencing multiple performance issues and one KPI of the underlying issue was the number of discarded packets.

The script will get a collection of NICs from the specified server, and then loop through them and remove the non-physical ones.

For example it will remove the Teredo, ISATAP or 6to4 interfaces. For the purposes of this script we are concerned with the physical ones, and that includes the "physical" NICs that are made visible in virtual guest Operating Systems.

NIC names are not hardcoded into the script else it would not be portable across physical server types and hypervisors.

Packets Received Discarded is the performance counter reported to Windows by the NIC which states how many packets were sucessfully received, i.e. not corrupt or failed checksum that were discarded before the NIC could push them up the stack. This has been documented as a known issue with certain hypervisors when the virtual NIC buffer is not set high enough or there are other issues on the hypervisor host such as a configuration or performance issue.

Script will report to the screen the number of discarded packets. This script includes output to CSV using standard methods. In the CSV file there will be one line per selected interface on each server queried. Thus if a server has two physical NICs then there will be two lines for that particular server. See note above stating that logical interfaces will be filtered out.

Using Telnet to verify communication

If TCP/IP ports are exhausted, the workstation agents will not be able to connect to the SSA. If you ever think this is occurring you can run the following command from a CMD.EXE window on the workstation:

telnet nnn.nnn.nnn.nnn 3884

replacing nnn.nnn.nnn with the TCP/IP address of your SSA server host.

If the message "Connection to host lost" appears that indicates the workstation was successfully able to open TCP/IP port 3884 at the SSA host. The "connection lost" appears because port 3884 at the SSA does not respond to telnet commands so the telnet client aborts.

If any other message appears, for instance:

Could not open connection to the host, on port 3884: Connect failed

then that workstation is unable to connect with the SSA via TCP/IP. Either the SSA is inactive, the server hosting the SSA is out of ports, Reverse IP Lookup is disabled or there is a firewall blocking port 3884.

If your workstation does not have telnet.exe available you can enable it by doing the following:

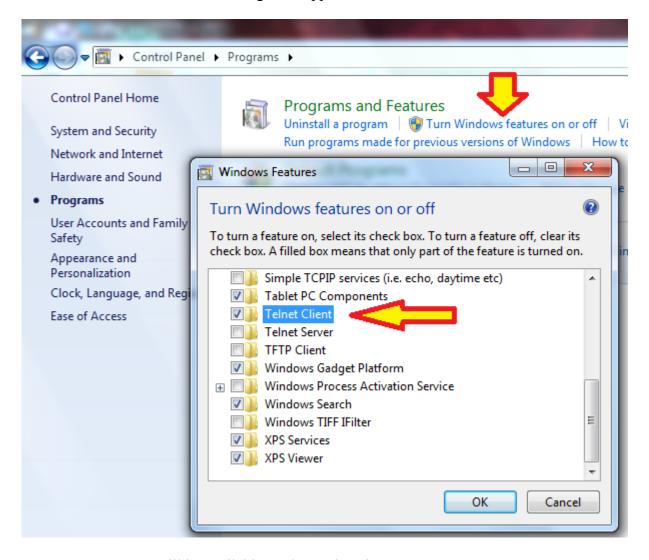
Open control panel.

Next go into Programs.

Then in programs and features there should be a part that says `turn windows features on or off`.

Click 'turn windows features on or off' then on the list that appears simply check the box beside: **Telnet Client**.

Then click ok. A Please Wait message will appear while the Telnet Client is enabled.



Now TELNET.EXE will be available on the workstation.

VMware Solutions for Poor Network Performance

The following is an excerpt from this link:

https://pubs.vmware.com/vsphere-

 $\underline{50/\text{index.jsp?topic}} = \underline{\%2Fcom.vmware.vsphere.monitoring.doc}\underline{50\%2FGUID\text{-}C4EA86FD\text{-}95CB-}\underline{4DE7\text{-}A9E3\text{-}63F6BFC1A268.html}$

Network performance is dependent on application workload and network configuration. Dropped network packets indicate a bottleneck in the network. Slow network performance can be a sign of load-balancing problems.

Problem

Network problems can manifest in many ways:

- Packets are being dropped.
- Network latency is high
- Data receive rate is low.

Cause

Network problems can have several causes:

- Virtual machine network resource shares are too few.
- Network packet size is too large, which results in high network latency. Use the VMware AppSpeed performance monitoring application or a third-party application to check network latency.
- Network packet size is too small, which increases the demand for the CPU resources needed for processing each packet. Host CPU, or possibly virtual machine CPU, resources are not enough to handle the load.

Solution

- Determine whether packets are being dropped by using **esxtop** or the advanced performance charts to examine the **droppedTx** and **droppedRx** network counter values. Verify that VMware Tools is installed on each virtual machine.
- Check the number of virtual machines assigned to each physical NIC. If necessary, perform load balancing by moving virtual machines to different vSwitches or by adding more NICs to the host. You can also move virtual machines to another host or increase the host CPU or virtual machine CPU.
- If possible, use **vmxnet3** NIC drivers, which are available with VMware Tools. They are optimized for high performance.
- If virtual machines running on the same host communicate with each other, connect them to the same vSwitch to avoid the cost of transferring packets over the physical network.
- Assign each physical NIC to a port group and a vSwitch.
- Use separate physical NICs to handle the different traffic streams, such as network packets generated by virtual machines, iSCSI protocols, VMotion tasks.
- Ensure that the physical NIC capacity is large enough to handle the network traffic on that vSwitch. If the capacity is not enough, consider using a high-bandwidth physical NIC (10Gbps) or moving some virtual machines to a vSwitch with a lighter load or to a new vSwitch.
- If packets are being dropped at the vSwitch port, increase the virtual network driver ring buffers where applicable.
- Verify that the reported speed and duplex settings for the physical NIC match the hardware expectations and that the hardware is configured to run at its maximum capability. For example, verify that NICs with 1Gbps are not reset to 100Mbps because they are connected to an older switch.
- Verify that all NICs are running in full duplex mode. Hardware connectivity issues might result in a NIC resetting itself to a lower speed or half duplex mode.
- Use vNICs that are TSO-capable, and verify that TSO-Jumbo Frames are enabled where possible.
- Ensure the Storage Device used by the SSA to store workstation activity log files and processing each into SQL Server is not introducing its own latency

Poor network performance can also result from an overcommited virtual host. For VMware, statistics provided by esxtop can provide insights.

Follow this link:

https://www.yellow-bricks.com/esxtop/

Search on these items:

%RDY

%MLMTD

%CSTP

Further here:

 $\frac{https://communities.vmware.com/t5/Storage-Performance/Interpreting-esxtop-4-1-Statistics/ta-p/2786881$

That will allow you to review the history of that virtual machine hosting the SofTrack Server Agent.

We recommend a %RDY of no greater than 10 but there are other potential issues as found by searching on those other items noted above.

Note: Excessive %CSTP (Co-Stop) will directly relate to the slowness since the CPUs of the virtual machine were inactive for large amounts of time and incapable of processing network I/O traffic.

Upgrading Existing Installation of SofTrack Managed Assets

The following instructions are intended to assist in upgrading an existing installation of SofTrack Managed Assets. These instructions are not intended to be utilized during the original installation of SofTrack Managed Assets.

To upgrade an existing installation of SofTrack Managed Assets will require one or all of the following procedures. Proceed with upgrading in the order provided regardless of the actual components involved.

To begin, download the latest version of SofTrack. There is a button on the home page of the SofTrack Console or you can directly download from this link:

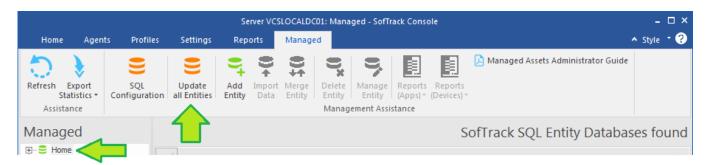
www.softwaremetering.com/outgoing/softrack full.zip

Next, extract all items in the downloaded zip file, it is ok to overwrite an existing path where the SofTrack Console has been previously installed or you can extract to a new path.

Launch the console with the following command line (the command line is not case sensitive):

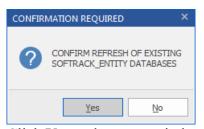
softrack console /SQLupdate

Once open, click on the Managed section and the following or similar will be presented:



Ensure the Home section (at left side menu) is selected and then click the **Update all Entities** ribbon button (highlighted above).

The following will be presented:

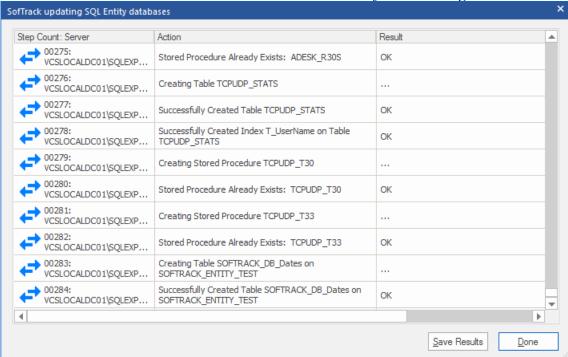


Click **Yes** and a status window will appear that indicates all actions.

Note: NO DATA WILL BE DELETED

This update will ensure all existing SQL Databases are updated with the latest Tables definitions including new Tables, Stored Procedures and other. New Tables are not always part of an upgrade, but this step ensures your SQL Tables (for each SQL Database) are correctly formed.

The following is an example output of the SQL Database update process:



Please use the **Save Results** button to export the results of the update. This button will present a prompt for a filename. Enter a filename, it will be saved as a CSV file with a .CSV extension.

The "Result" column (shown in the image above) can be clicked to sort, if all values are either "..." or "OK" then the update was 100% successful. If any other value appears, please send the results CSV file to support@softwaremetering.com for assistance.

The next step is to update the SofTrack Server Agent. <u>Click here to find the update instructions previously detailed in this chapter</u>.

The final step is to update the workstation agent. <u>Click here to find the update instructions</u> for the <u>SofTrack Managed Assets agent</u>. If, after following the instructions in the linked section, the workstation agent installation fails, use the following command to install:

In the examples below, replace the "stslam-install-ENTITYNAME.msi" with the actual filename of your installation MSI.

```
msiexec /I stslam-install-entityname.msi REINSTALL=ALL REINSTALLMODE=A
or this command
MSIEXEC /faevmus stslam-install-ENTITYNAME.msi
```

SLAM MSI Re-Installation and Error 1603 or Error 2753

This section details how to successfully re-install your SofTrack Managed Assets installation on a workstation when the commands in the previous section fail due to error 1603 or 2753 (The File 'stswrap.exe' is not marked for installation.)

Causes:

When the SLAM MSI filename has changed, for example, if re-targeting a workstation to a use new Entity (and thus the MSI filename is different from the original time the MSI was installed) or if the MSI filename being used is different than what was originally used, specifically the MSI filename is for an IP address instead of the server name (or server name instead of an IP address), this will cause the MSI installation to fail with error **1603**.

Solution:

To re-install the MSI when error 1603 is occurring, please use the following command:

REG DELETE HKCR\Installer\Products\A6A8DB28BBEAE4E4D9AAEE3AF0F7ECB7

The command above will remove the SLAM MSI installation registry key that was based on the previous SLAM MSI filename.

After completing the above instruction, use only the following command to re-install:

MSIEXEC /I stslam-install-ENTITYNAME.msi

If, after using the REG DELETE command, you use one of the other re-installation command lines shown in the previous section, you will receive an error 2753. To resolve, use only the command:

MSIEXEC /I stslam-install-ENTITYNAME.msi

If you have any issues upgrading your SofTrack Managed Assets installation, please contact our support team at:

support@softwaremetering.com



Overview

SofTrack Managed Assets utilizes Microsoft's SQL Server® or SQL Server Express® to store all activity data for reporting. The minimum recommended version of either SQL product is 14.0 (suitable for use on Windows® Server 2012 and all later versions of Windows® Server).

Use of SQL Server Express® restricts each database to a maximum size of 10GB. This size is equivalent to approximately 1 year of activity data from 200-250 workstations. Each workstation is expected to average 2MB-4MB of data per day, not including disk space required for SQL Server's Transaction Log maintained per database. Only those installations with 100 or fewer workstations should consider use of SQL Server Express®.

SofTrack Managed Assets (SMA) utilizes one or more SQL Databases (termed "Entities") to differentiate data collected as required. For example, each Entity separately stores data per business unit, geographic area, for MSP's, per customer; or any other requiment. SMA Reporting can be produced for any specific Entity or spanning multiple entities.

About Azure SQL

SofTrack has been designed to work with Microsoft's SQL Server®. SQL Server® can be installed on Azure Virtual Machines (VMs) on the Windows platform.

https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/sql-server-on-azure-ym-iaas-what-is-overview?view=azuresql

The design of Microsoft's Azure SQL® is sufficiently different from SQL Server® to make it incompatible with SofTrack.

https://learn.microsoft.com/en-us/azure/azure-sql/azure-sql-iaas-vs-paas-what-is-overview?view=azuresql

Only SQL Server® or SQL Server Express® can be used by SofTrack.

SQL Server Database Recovery Model Configuration

SofTrack's use of SQL Server only requires use of the Simple Recovery Model. Utilizing the Simple Recovery Model will reduce disk space requirements for SQL Server's Transaction Log.

The Recovery Model is configured per Database.

Review the following link for all Recovery Model Configurations including how to change the recovery model:

https://learn.microsoft.com/en-us/sql/relational-databases/backup-restore/view-or-change-the-recovery-model-of-a-database-sql-server?view=sql-server-ver16

If using the SQL Server Management Studio you can directly change the recover mode via the command

ALTER DATABASE SOFTRACK ENTITY DEFAULT SET RECOVERY SIMPLE;

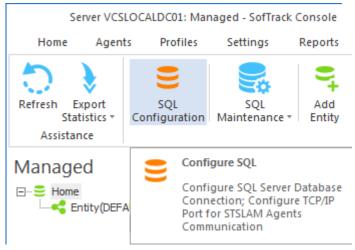
This will need to be repeated for each SofTrack Entity Database.

SQL Configuration

SofTrack's Managed Assets requires two primary configurations. The first is defining the connection to the selected Microsoft® SQL Server. The second is the installation of the workstation agent (ST_SLAM Agent – detailed in Chapter 4).

SofTrack's Managed Assets utilizes Microsoft's SQL Server (free Express edition or licensed edition). It is presumed a Microsoft® SQL Server has been previously installed and accessible by both the SofTrack Server Agent host and any workstation using the SofTrack Console for managing or reporting of SofTrack Managed Assets.

To begin, open the SofTrack Console, select the Managed section and click the SQL Configuration ribbon button:



And the following window will appear:

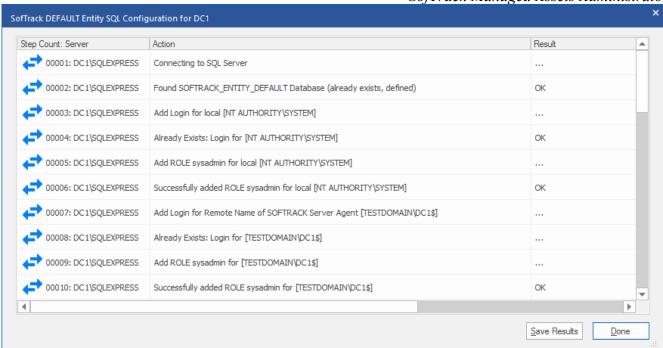
SQL Transfer Configuration for server DC1	×
Master Configuration to be used by ALL SofTrack Entity Databases	Save Settings
Enter Name of SQL Server:	Cancel
Example SQL Server Name: DC1\SQLEXPRESS	
Please ensure that the selected 'SQL Server Network Connection' is configured for TCP/IP and, if needed, Named Pipes	
Note: To perform the following functions your current logon credentials must have sufficient privileges on the selected SQL Server	
Click here to connect to defined SQL Server and add current server object as 'sysadmin' role and create/update SofTrack Entity Default DB + Tables	
Define TCP/IP Port for STSLAM Agent communications:	
Port must be unused for any other software on your network	
Suggested Port value: 50000 - 64000; maximum value = 64000	
Selected Port must be allowed at all hardware and software Firewalls + pass-thru rules at each WAN Acc	celerator
Changing an existing Port to a new value while the SSA is currently active will be recognized after next S restart	SSA
If set to 0, agent communications via TCP/IP will not occur, however, communication via named pipes w remain available, otherwise all agent activity journal files can be manually copied from each workstation to STLOG\STSLAM folder	

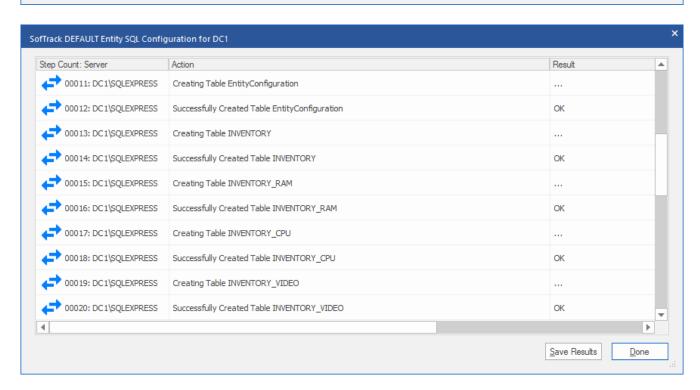
Begin by entering the server name + SQL server instance name.

Next, click the button "Click here to connect to defined SQL Server...", a progress window will be shown:

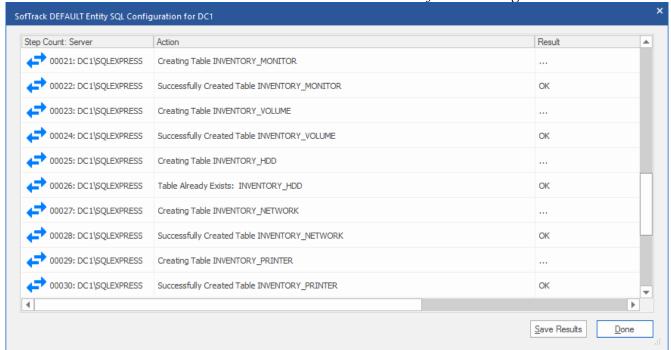
Creating the DEFAULT Entity

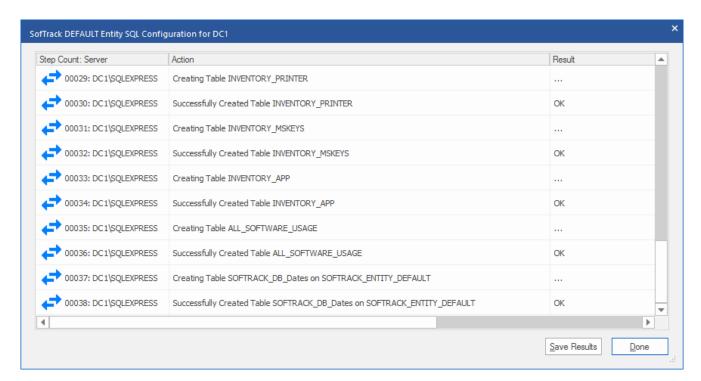
SofTrack Managed Assets Administrator Guide





SofTrack Managed Assets Administrator Guide

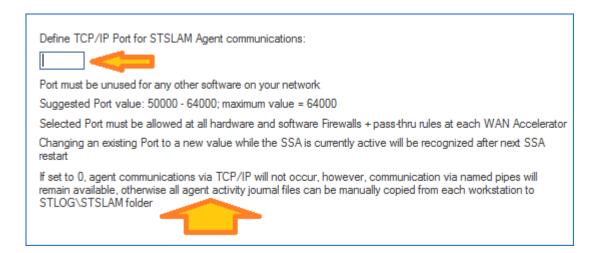




Definitions for each SQL Table are located in Chapter 9.

ST_SLAM TCP/IP Configuration

If any errors occur, click the Save Results button and send via email to support@softwaremetering.com - once successfully complete, click Done and then set the TCP/IP Port:

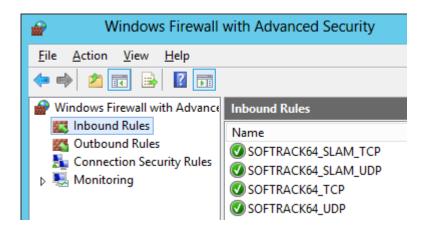


If the TCP/IP Port is not defined, the SofTrack Managed Assets Agents will be unable to connect via TCP/IP. However, if workstations are on the same local network as the SofTrack Server Agent Host, communication via Named Pipes will be attempted.

The Port value is customer-defined, select any Port not currently in-use at the SofTrack Server Agent host in the range 50000 through 64000. Ensure all inbound and outbound activity for the selected Port is allowed at all Firewalls (software and hardware). If using any network caching devices such as those provided by Riverbed®, ensure "pass-through" rules are defined for all inbound and outbound activity on the selected Port.

Except for the initial configuration, if the Port value is changed it will take effect the next time the SofTrack Server Agent (SSA) is started.

When the SSA starts and the Port (above) is defined, it will automatically add that Port value as an inbound firewall rule to allow its activity to be received by the SSA:



Important:

If the Port is changed, the firewall rule will not be automatically updated to indicate the new Port.

Ensure the server's Windows® firewall rules SOFTRACK64_SLAM_TCP and SOFTRACK64_SLAM_UDP are updated with the new Port value.

SQL Transfer

The SofTrack Server Agent automatically starts an application with the filename SQLSTSXF.EXE to process workstation activity files (*.STS) found in the STLOG\STSLAM path that has been licensed verified (becomes filename matching *.STSSQL). This process will insert activity data in the appropriate SofTrack Entity SQL Table(s) and upon successful completion remove the *.STSSQL file.

If any errors occur during processing, SQLSTSXF.EXE process will record each to a log file named sqlstsxf.log and this log file will be found in the same path as the SofTrack Server Agent's files (typically C:\Windows\Syswow64\Drivers or C:\Windows\Syswow64).

Depending on the number of unprocessed *.STSSQL files, the SQLSTSXF.EXE process will create up to 249 threads to enable expedited processing of workstation activity into SQL Server. This can result in the SQLSTSXF.EXE process using close to 1GB of RAM, this is normal and expected.

Entity Configuration

About DEFAULT Entity

The SofTrack Managed Assets (SMA) SQL Configuration automatically creates the DEFAULT Entity in the initial configuration (shown 2 pages previous). The DEFAULT Entity (SQL Database with multiple SQL Tables) is *always required* as SofTrack depends on its existence for several items included location for SQL Server Stored Procedures (used for reporting) and various configuration definitions. Further, the DEFAULT Entity can also be used for storage of user activity.

SofTrack enables grouping of related workstations per "Entity", creating a separate SQL Database with multiple tables for each. Any number of Entities can be defined for any requirement by the customer. SofTrack defines the "DEFAULT" Entity that will be initially created and used by default. For many customers, this may be the only Entity used. For other customers, Entities could be created to separately track different organizational divisions, geographic locations, or any other requirement. For Managed Service Providers (MSP), Entities would typically represent separate end-customers. There is no limit on the number of Entities that can be created and used.

Within an Entity SQL database, the combination of workstation name + Machine GUID (provided by Windows®) is presumed to be unique. Each unique workstation will require a SofTrack Managed Assets license. SofTrack's Managed Asset licensing is independent of the number of Entities, only the number of unique workstations (using the STSLAM agent) are identified and tallied (across all Entities) towards the number of licenses required. If the STSLAM agent is installed on machine

using Windows® terminal server licensing, the number of RDS/CALs (Remote Desktop Services/Client Access Licenses) installed will be tallied and require an additional SofTrack Managed Assets terminal server session license. If a workstation is retired or otherwise no longer requires a license, its license <u>can be freed</u> for use by another workstation. Data from a workstation whose license has been freed (removed) will continue to be available for reporting, no data is deleted when a workstation license is freed.

As found in the SofTrack Console, Managed section, the **Home** view shows all SofTrack Entity SQL Databases and related statistics.

SofTrack SQL Entity Databases found

	SofTrack Entity Databases	_	Date Created		Database Size		Transaction Log Size		Number of Computer	rs
×	test	×	<all></all>	0	<all></all>	Q	<all></all>	Q	<all></all>	Q
	SOFTRACK_ENTITY_TEST		2022-06-05 21:54:09		190.50 MB		92 MB		36	
	SOFTRACK_ENTITY_TEST03		2023-11-05 20:13:15		16.25 MB		6 MB		36	
	SOFTRACK_ENTITY_TEST2		2023-10-11 16:48:58		8.63 MB		< 1MB		36	

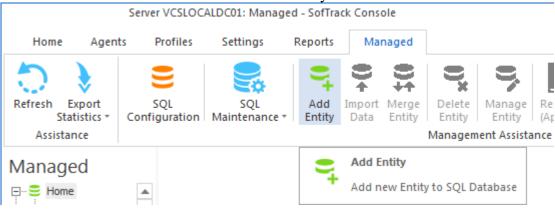
Defining additional Entities

SofTrack's Managed Assets (SMA) provides the ability to define separate databases as needed. Each database is termed an "Entity" and, as shown in the image above, always includes the prefix "SOFTRACK_ENTITY_" followed by the customer-defined Entity name. The customer-defined portion of the Entity name can be up to 32 characters in length.

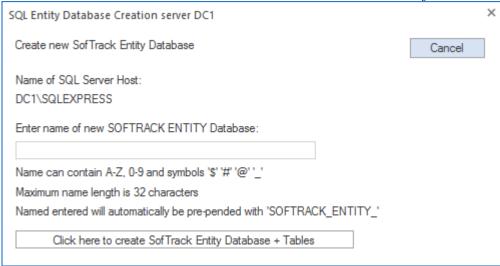
For organizations with fewer than 2000 workstations a single Entity may be the correct choice, either DEFAULT Entity can be used or one or more new Entities created, for example, named for the company, department, location, function or any other differentiation.

Adding an Entity

To add a new Entity (therefore creating a new SQL Database + Tables), in the SofTrack Console, click on the Home section and click the Add Entity button:



The following prompt will appear:



As shown above, the name defined can be up to 32 characters. Letters A-Z, numbers 0-9 and symbols # @ are allowed. If any spaces or other characters (such as a period or dash) are entered in the name to create, each will be automatically converted to an underscore before creating the Entity.

The name entered will automatically be pre-pended with the name 'SOFTRACK ENTITY'

All SofTrack SQL Databases start with the name

SOFTRACK ENTITY

If the name entered exactly matches an existing Entity, the Entity's SQL Tables, Indexes and Stored Procedures will be re-created (if any were missing). The Existing Table's data will be unchanged and no data lost.

A progress window will appear after clicking the button (shown in the image above):

Click here to create SofTrack Entity Database + Tables

Considerations for planning Entity creation

SofTrack Managed Assets (SMA) allows any number of Entities to be created. Additionally, Entities can be <u>merged</u> and <u>deleted</u>. SMA workstation STSLAM agents are pre-configured to report to a specific Entity, this connects each workstation agent to a specific Entity. All data gathered for each STSLAM agent will be reported and stored in the pre-defined Entity's database. When required, data from one or more individual workstation's agent can be <u>selectively moved to a different Entity</u>. Additional functionality is detailed in <u>Chapter 5</u>.

The following is a simple example of an Entity Structure using 2 Entities:

Active

Retired

The **Active** Entity receives all gathered activity data from STSLAM agents. Later, as workstations are retired or removed (i.e. lost, stolen, destroyed, etc) the activity data for those workstations are moved to the **Retired** Entity. This can provide an easy method to constrain reporting without requiring any special reporting rules. Simply report from the **Active** Entity for current activity, and, when required, report past activity from the **Retired** Entity.

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•						. J									,			

Staff

Students

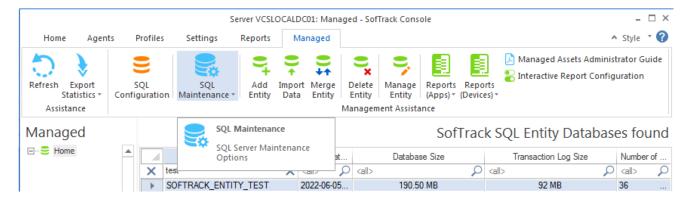
Labs

The following is a more complex example of an Entity Structure using 5 Entities:
Accounting
Engineering
Management
Field
Retired
The business units Accounting, Engineering and Management Entities receive data gather from workstations used by persons in those specific areas of the organization. The Field Entity receives data from offline sources such as Laptops used on outside projects and are not regularly in the office.
The following is a more complicated example of an Entity Structure using business unit and region:
Main_Austin
Main_New_York
Main_Dubai
Main_London
Main_Signapore
Main_Australia
Main_Americas
Engineering_Austin
Engineering_Dubai
Accounting_New_York
Field_Dubai
Field_Singapore
Field_Canberra
The goals of segmenting Entities as shown above is two fold:

One result is is it enables reporting to quickly and easily identify relevant organization divisions and associated usage.

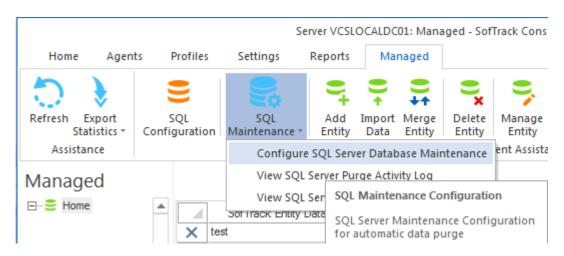
The other, is for performance, each Entity above could utilize a separate SofTrack Server Agent (SSA) and therefore streamline data collection local to each separate office while requiring only a single connection (i.e the SSA) from each location to the centralized SQL Server host that stores all activity for all Entities. This can be particularly important for larger organizations with thousands of workstations. To be clear a single SSA can handle processing of an unlimited number of Entities, there is no requirement to have a separate SSA for each Entity.

Automatic SQL Maintenance

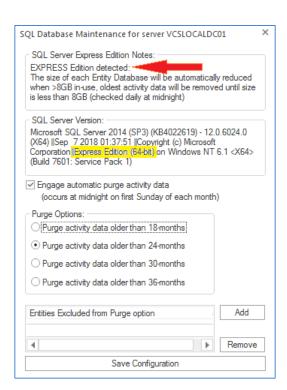


SofTrack's Managed Assets (SMA) includes automatic SQL Maintenance features. These abilities provide data purging as indicated in this section of each SMA Entity Database.

To review the current SQL Server® details, from the SQL Maintenance ribbon button, select Configure SQL Server Database Maintenance:



The following will appear:



This window shows the version of SQL Server® in-use and if Express® edition detected. This window also provides options to automatically trim the SQL Databases for each selected Entity (this is described later in this Chapter).

Automatically Maintaining SQL Server Express®

SMA can use Microsoft's SQL Server® or SQL Server Express®. An important limitation of the Express® edition is each SQL Database is allowed a maximum of 10GB of space and once reached no more data can be added.

When the Express® edition is in-use, to assist with maintaining the data collected by SMA, the SofTrack Server Agent (SSA) will automatically (no configuration required), each day at midnight, connect to SQL Server Express® and obtain the size of each SMA Entity Database and if any are found to be using more than 8GB of space, a process will be started by the SSA to remove the "oldest" 30 days of activity from the following tables:

ALL_SOFTWARE_USAGE ALL_PAGE_TITLE_ACTIVITY TCPUDP_STATS ALL LOGON ACTIVITY

The other tables do not grow in response to time and are unlikely to be of a significant influence on the overall size of the SQL Database (per Entity database).

The date of the oldest activity is first detected via a SQL Query and then the 30-day period after that time is determined. This process is completely automatic.

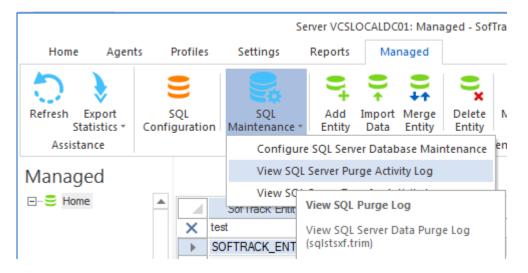
When data is removed a log file named SQLSTSXF.TRIM will be created (and maintained) and

activity performed detailed within. This file is found in the path where the SSA is installed (typically c:\windows\syswow64 at the SSA host server).

Sample result:

```
[ver=2023.11.09]Event @ 11/5/2023 00:00:06 :TRIM SQL DATABASE; SOFTRACK_ENTITY_TEST03; Current Size: 8158 MB;
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM [SOFTRACK_ENTITY_TEST03].[dbo].[ALL_SOFTWARE_USAGE]
WHERE ((EXEEXITIME <= '2021-11-01 00:00'));;
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM
[SOFTRACK_ENTITY_TEST03].[dbo].[ALL_PAGE_TITLE_ACTIVITY] WHERE ((PageViewStartTime <= '2021-11-01 00:00'));;
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM [SOFTRACK_ENTITY_TEST03].[dbo].[TCPUDP_STATS] WHERE
((ConnectionStartTime <= '2021-11-01 00:00'));
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM [SOFTRACK_ENTITY_TEST03].[dbo].[ALL_LOGON_ACTIVITY]
WHERE ((RecordType=193) AND (LogoffTime <= '2021-11-01 00:00'));
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM [SOFTRACK_ENTITY_TEST03].[dbo].[ALL_LOGON_ACTIVITY]
WHERE ((RecordType=200) AND (UnlockTime <= '2021-11-01 00:00'));;
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM [SOFTRACK_ENTITY_TEST03].[dbo].[ALL_LOGON_ACTIVITY]
WHERE ((RecordType=200) AND (UnlockTime <= '2021-11-01 00:00'));;
[ver=2023.11.09]Event @ 11/5/2023 00:00:16 :DELETE RECORDS WORKED; DELETE FROM [SOFTRACK_ENTITY_TEST03].[dbo].[ALL_LOGON_ACTIVITY]
WHERE ((RecordType=200) AND (UnlockTime <= '2021-11-01 00:00'));;
```

This file's contents can be viewed within the SofTrack Console:



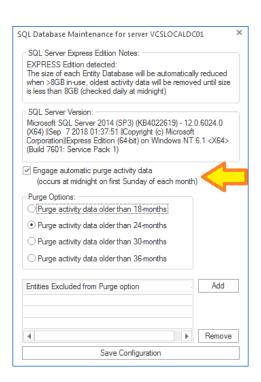
Optionally Purge Older Data of each SQL Server® Database

SofTrack Managed Assets (SMA) can be optionally configured, per SofTrack Entity Database, to purge data with timestamps older than one of the following time periods:

- 18 month
- 24 month
- 30 month
- 36 month

To configure, from the SQL Maintenance ribbon button menu, select Configure SQL Server Database Maintenance.

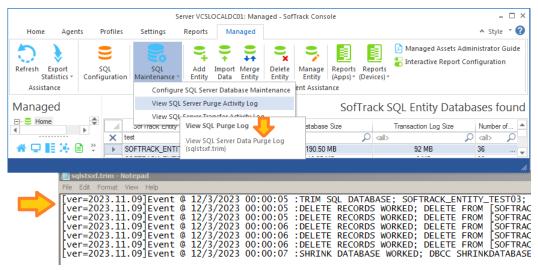
The following window will appear:



Click the "Engage automatic purge activity data.." checkbox and then select the time period. The time period configured will only purge data from the following tables of each included SofTrack Entity Database that was collected prior to the indicated time period (using the current date performed to determine the purge date to use).

ALL_SOFTWARE_USAGE ALL_PAGE_TITLE_ACTIVITY TCPUDP_STATS ALL_LOGON_ACTIVITY

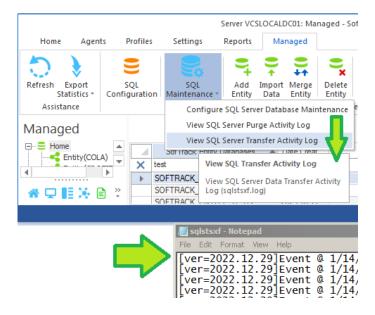
When configured, the purge process is automatically performed by the SofTrack Server Agent (SSA) at midnight on the first Sunday of each month. The details of the purge process is saved to the SQLSTSXF.TRIM file located in the SSA path at the host server. Typically this path is c:\windows\syswow64. Further, the contents of this file can be directly viewed via the View SQL Server Purge Activity Log menu item:



This option can be configured to exclude specific Entities from being automatically purged. Use the Add and Remove buttons to manage.

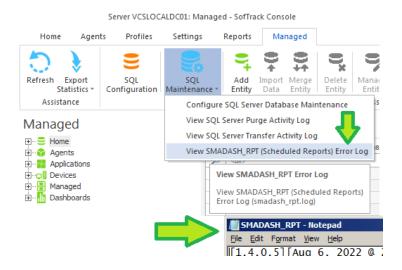
Viewing the SQL Server® transaction activity log

SofTrack Managed Assets (SMA) includes the ability to review any exceptions that have occurred during inserting of workstation agent data into SQL. This option may be requested by our support team to help review and correct issues preventing collected data from being inserted into SQL.



Viewing the SMADASH_RPT Error log

SofTrack Managed Assets (SMA) includes the ability to review any exceptions that have occurred during scheduled reports (SMADASH_RPT.LOG). This option may be requested by our support team to help review and correct issues preventing scheduled reports from successfully completing.





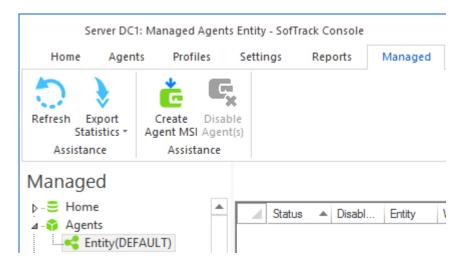
Overview

User and workstation activity is gathered by the SofTrack Managed Assets (SMA) workstation STSLAM agent. Without further configuration, the STSLAM agent automatically gathers all data. The only configuration required is the name of the Entity to report to and the server to transmit gathered activity for inclusion into SQL Server. The STSLAM agent does not require connectivity to the SofTrack Server Agent (SSA). For those workstations operating offline, the STSLAM agent records all activity to journal files and those files can be manually copied to the SSA for reporting.

To begin the process of configuring the STSLAM agent installation MSI, open the SofTrack Console and select the Managed tab.

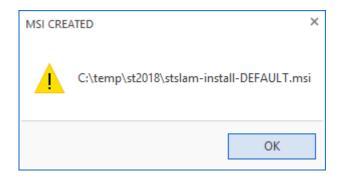
Workstation Agent installation via MSI

Open the Agents view within the Managed section of the SofTrack Console and select the desired Entity.

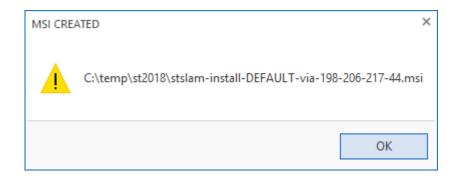


Click the *Create Agent MSI* button in the ribbon bar. It will respond with a two pop-up messages:

The path shown in the pop-up messages will be the same as where the SofTrack Console was opened.



and



The first MSI will default to using Named Pipes via the server name and if Named Pipes is not available it will then attempt communication via TCP/IP if the server's IPv4 address is resolvable via DNS. This MSI also includes the Entity name and will be used to configure the agent when installed.

The second MSI will default to using TCP/IP via the IPv4 address detected for the current SofTrack Server Agent host (198.206.217.44 based on the image above). If communications via TCP/IP are unsuccessful the agent will not attempt Named Pipe communications. This MSI also includes the Entity name and will be used to configure the agent when installed.

IMPORTANT:

Choose one MSI to install the STSLAM agent, the choice of communication style is the only difference between the 2 MSIs created by this process.

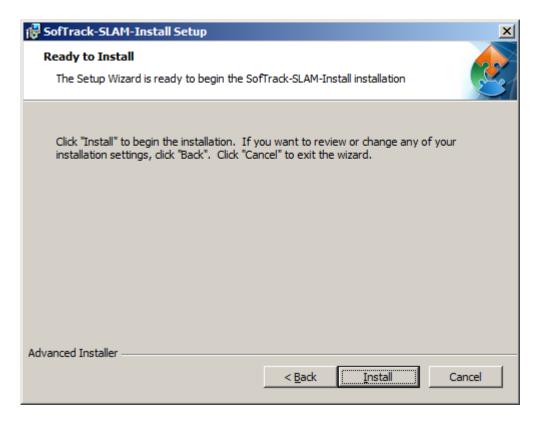
Anytime the STSLAM agent is unable to connect to the SofTrack Server Agent (SSA) it will continue to track activity to journal files located in the local ST_SLAM.ASL path as further discussed in this section. Once network connectivity again allows connection the SofTrack Server Agent, the collected activity journals will automatically be transmitted. However, the STSLAM Agent can operate completely offline at all times and only its activity journals (rendered in files) need be moved to the SSA for inclusion in reporting.

The Create Agent MSI function uses the stslam-install.msi file that was created during the extraction of the SofTrack files. Never directly modify or use the stslam-install.msi file this is the unconfigured msi file used as the basis to create MSIs for each Entity.

The resulting files, in the example above 'stslam-install-DEFAULT.msi' and 'stslam-install-DEFAULT-via-198-206-217-44.msi' are ready for distribution to your workstations. This MSI can

be manually run and it can also be distributed via a GPO in Active Directory environments or other distribution tool.

When manually launched, the MSI will appear similar to the following:



After clicking the Install button, the installation will quickly complete.

However, the Installation process is not complete, it automatically starts a process named:

STSWRAP.EXE

And this process can take up to 2 minutes to complete.



Once its process exits, the agent is immediately started (i.e. STSWRAP.EXE process ends and the ST_SLAM.EXE process is started).

The agent installation (stswrap.exe) will result in the following files

```
ST_SLAM.EXE
TSLTSE64.EXE
SMA 32.DLL
```

SMA 64.DLL

SLAM K64.SYS

 ${\tt INVENTRY.EXE} \hspace{0.2cm} \textbf{(this file is shared with the SofTrack License Control workstation agent,} \\$

licensed separately)

SMAADESK.DLL (this file is used to track Autodesk® Plugin and Addin usage)

SMAA64c.EXE

Being created in the following path:

(64bit system)

C:\windows\syswow64\drivers

(32bit system)

C:\windows\system32\drivers

The file SLAM_K64.SYS is for 64-bit systems and is installed in the path

C:\windows\system32\drivers

Once started, the STSLAM agent will create a new folder, ST_SLAM.ASL in the path where it is installed. This folder will be used to stage encrypted journal files (*.STS) for delivery via TCP/IP or Named Pipes. These files can also be manually moved to the SofTrack Server Agent path:

STLOG\STSLAM

for processing.

Also, after the STSLAM agent is in-use, the file

inventory.isw

will be created, do not move or remove this file it is used internally by the STSLAM agent.

The agent installation process creates 2 Windows services, the "SofTrack Software License Asset Managed (STSLAM) Service" and, only on 64-bit systems, the "SLAM_K64" service. The SLAM_K64 service is not shown in the Windows® services control panel, it is only started and stopped by the "SofTrack Software License Asset Managed (STSLAM) Service".

Reconfiguring Server name or Entity name

Important:

If you change the SERVERNAME or ENTITYNAME used by any workstation where the STSLAM Agent (MSI) has been installed you have two methods to make changes to either or both of these values:

Option #1:

Create a new MSI via the SofTrack Console and on the workstation, manually re-cache it with the following command:

```
MSIEXEC /fv install-stslam-ENTITYNAME.msi
```

This will force the new MSI to be used instead of the cached version of the previous version of the MSI used for installation. This command will ensure this newer MSI will be cached on the workstation where installed.

Next, to perform the re-installation enter the following command:

```
MSIEXEC /fa install-stslam-ENTITYNAME.msi
```

If either or both of the above fail to successfully complete, use the following command:

```
msiexec /I stslam-install-entityname.msi REINSTALL=ALL REINSTALLMODE=A
```

The MSI process screen will complete/close, however, the update process continues. Please wait until it completes before rebooting the workstation.

Option #2:

The server name and entity can be re-configured on a specific workstation without re-installing the MSI.

To change the server name, create a text file named:

```
server.st slam
```

and make its only contents either the server name such as **FSI** or the server's IPv4 address such as **10.1.1.1**

To change the entity name, create a text file named:

```
entity.st slam
```

and make its only contents the name of the entity such as **DEFAULT** or **IT DEPARTMENT**.

After the file is created there are two possible paths to place the file:

```
(64bit system)
```

C:\windows\syswow64\drivers

(32bit system)

C:\windows\system32\drivers

-or-

C:\users\<username>\Desktop

The STSLAM agent will check once per minute for these files and if found will read the file, store the new value(s) to the local workstation Windows® Registry and then delete the file (server.st slam or entity.st slam).

Communication Methods

The first STSLAM Agent MSI (i.e. "stslam-install-EntityName.msi) is always configured using the Server Name. This server name is used by the STSLAM Agent to attempt communications to deliver the workstation's activity journal (log files). The agent will initially attempt to communicate via Named Pipes. Named Pipes utilize normal Windows communications methods and do not require any changes to any firewalls. If Named Pipe communications are not available the agent will then attempt to look up, via DNS, the IPv4 address of the Server (by the server's name). If successful in acquiring the IPv4 address the agent will attempt to communicate first via Port 3884 (SofTrack's static port assigned by the IANA for worldwide use) to determine the Managed Assets Port to be used. If no port is configured (i.e. Port value is 0) or if communications via Port 3884 are not successful the agent will be unable to deliver its journal files via the network.

The second STSLAM Agent MSI (i.e. "stlsam-install-EntityName-via-198.206.217.44.MSI) is always configured to use the IPv4 address of the SofTrack Server Agent. The agent will attempt to communicate first via Port 3884 (SofTrack's static port assigned by the IANA for worldwide use) to determine the Managed Assets Port to be used. If no port is configured (i.e. Port value is 0) or if communications via Port 3884 are not successful the agent will be unable to deliver its journal files via the network.

As shown in the previous section, the server name value can be configured to be a direct IPv4 address. When the configuration is set to use a direct IPv4 address, there will not be any attempt to transmit via Named Pipes, only TCP/IP will be attempted.

In the SofTrack Console, Managed tab, Agents view, open the Entity to review the last communication times and method used for each workstation agent. If the workstation agent is unable to communicate you will either not find a value for its Last Communication or that time will be in the past. If the agent is able to communicate via the network, transmission is performed once every 15 minutes, however, if no ready journals are present, the agent will not communicate, rechecking every 15 minutes.

Agents View for Entity(COLA)

	Status	-	Disable	J U	Entity	/ N	Vorksta	it	M	TSEC	ALs	Agent	Version	Last IF	Addr	Last Co	ommunication	Last File Uploa	ad
0	<all></all>	D	<all></all>	Q	< \$	0	all>	Q		<all></all>	D	<all></all>	Q	<all></all>	Q	<all></all>	ρ	<all></all>	
	ALLOW	ED			COLA	V(CS1D0	1	37	0		7.01f		198.20	6.217	Sep 21	, 2020 at 1	Sep 20, 2020	at 14:

Separately, the "Last File Upload" column indicates the last time a workstation agent's journal file(s) were directly copied to the STLOG\STSLAM folder.

Agents View for Entity(COLA)

4	Status		Disab		Entity		Workstatio		Machine G		TSE CALs		Agent Vers		Last IP Ad		Last Comm		Last File U	
2	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q
	ALLOWED				COLA		DESKTO)P	NO_MG	UID	0		SI_IMP						Aug 11,	20
	ALLOWED COLA			MXL128	1	8eb76c	2a	0		7.01a						Aug 25,	20			

In the view above "SI IMP" value in the Agent Version column indicates that workstation was

imported (this type of agent will not use a license). SI=Smart Inventory, IMP=Import. This type of import is detailed later in this chapter.

Manually Upload STSLAM Agent Activity to SofTrack Server Agent

For workstations where the STSLAM agent has no connectivity to the SofTrack Server Agent there is the option to copy/move its journal files for reporting. To manually copy the agent's journal files, locate the following folder on the workstation:

```
(64bit system)
C:\windows\syswow64\drivers\ST_SLAM.ASL
(32bit system)
C:\windows\system32\drivers\ST_SLAM.ASL
```

This folder stores encrypted journal files (*.STS). These files can be manually moved to the SofTrack Server Agent path:

STLOG\STSLAM

The data within these files is encrypted and serialized for uniqueness. If these files are accidentally duplicated, there will be no duplication of data within the SQL Tables.

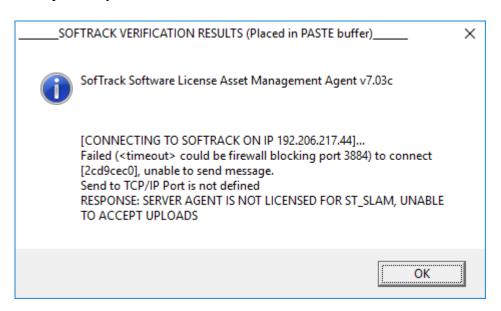
Communication Failure

If the STSLAM Agent is not connecting to the SofTrack Server Agent, at the affected workstation, enter the following command:

C:\windows\syswow64\drivers\ST SLAM -verify

It will present a status window detailing the communication problem.

Example verify result:



The text values are copied to the paste buffer to assist in sending the output via email.

Startup and Activity Tracking

When a user first logs on to a workstation while the STSLAM agent is active it will immediately begin tracking the user's activity.

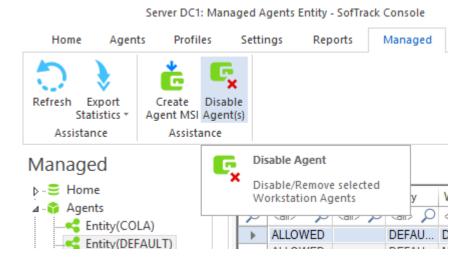
The STSLAM agent records all applications used, but only for applications that have a user interface. Other than selected activities such as TCP/IP upload and download activity and crashed applications, background activity of applications without a user interface is not recorded. Idle and Active time on the user desktop is tracked. And, the agent will retain tracking data in-between workstation reboots, thus if the workstation is suddenly turned off while the user was actively using applications, once rebooted, the agent will automatically record the correct exit time of each application based on the last minute of usage prior to the interruption (which could also be the result of a workstation crash instead of a power off event). Likewise, User "logoff" time will be indicated as the time of the abrupt workstation shutdown.

Removing a Workstation License

When a workstation is to be decommissioned, follow these procedures to ensure it no longer uses a

SofTrack Managed Assets workstation license:

To resolve, in the SofTrack Console, Managed tab, select the Agents view and then the select the Entity and locate the workstation and click the Disable Agents(s) button:



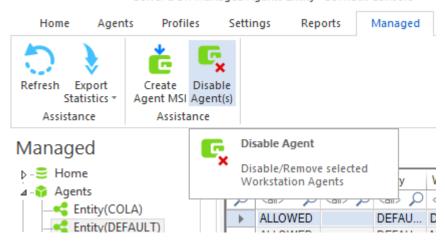
This will communicate to the SofTrack Server Agent that the workstation agent is no longer to use a license and that workstation will be blocked from transmitting/submitting any activity data for a period of 30 days. Any such newly received data will be deleted and not processed into SQL, thus ensure the workstation will no longer be transmitting data using the previous Entity name. After the 30-day period, the workstation's entry in the Agents Entity view will be automatically removed by the SofTrack Server Agent and that workstation will then be able to be again configured to use that specific Entity for its activity data collection.

If the workstation is to remain in-use, but no longer use the SofTrack workstation agent, use the MSI removal procedure. Otherwise, if the workstation is being retired and will no longer be in-use, the MSI removal procedure is not required.

Changing Workstation Entity and changing Workstation License

If changing the ENTITYNAME the workstation, once its data (logged using new Entity Name) is communicated to the SofTrack Server Agent, that workstation will be using 2 licenses. To resolve, in the SofTrack Console, Managed tab, select the Agents view and then the select the PREVIOUS Entity and locate the workstation and click the Disable Agents(s) button:

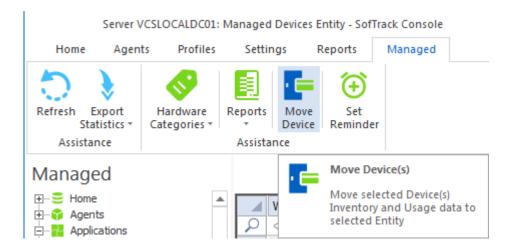
Server DC1: Managed Agents Entity - SofTrack Console



This will communicate to the SofTrack Server Agent that the workstation agent is no longer to use a license and that workstation will be blocked from transmitting/submitting any activity data for a period of 30 days. Any such newly received data will be deleted and not processed into SQL, thus ensure the workstation will no longer be transmitting data using the previous Entity name. After the 30-day period, the workstation's entry in the Agents Entity view will be automatically removed by the SofTrack Server Agent and that workstation will then be able to be again configured to use that specific Entity for its activity data collection.

To complete the workstation's transition to the new Entity, in the Device Entity view, select the workstation and click the Move Device button:

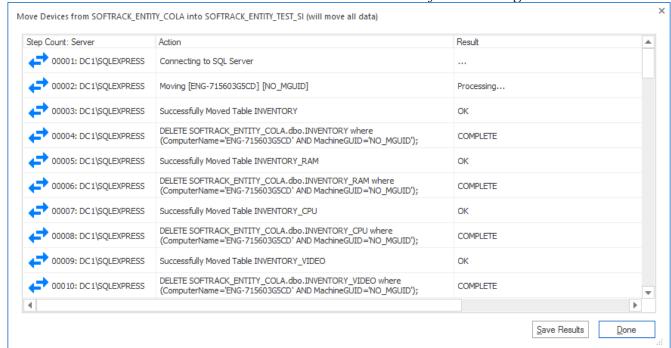
Move Device



This will present a window of available Entities, select one and the selected workstation's SQL data will be moved to the selected Entity and upon successful data move of each SQL Table, its data in the original Entity SQL Table will be deleted.

A progress window will appear to detail each action:

SofTrack Managed Assets Administrator Guide



Terminal Server Installation

When the STSLAM Agent is installed on a Windows® server that includes terminal services (native, Citrix®, other method), the agent will automatically detect the number of terminal server licenses installed (Microsoft® licenses). Sufficient SofTrack Managed Asset session licenses must be installed to allow activity logged on the terminal server to be recorded to SQL.

To ensure your SofTrack installation has sufficient Managed Assets Session Licenses, the following is how the agent detects the number of session licenses (RDS/CAL) installed:

On the terminal server, start powershell (start / run / powershell)

paste the following text into the powershell prompt:

get-wmiobject Win32 TSLicenseKeyPack | out-file c:\valid path\tsecals.txt

open the resulting tsecals.txt file with NOTEPAD

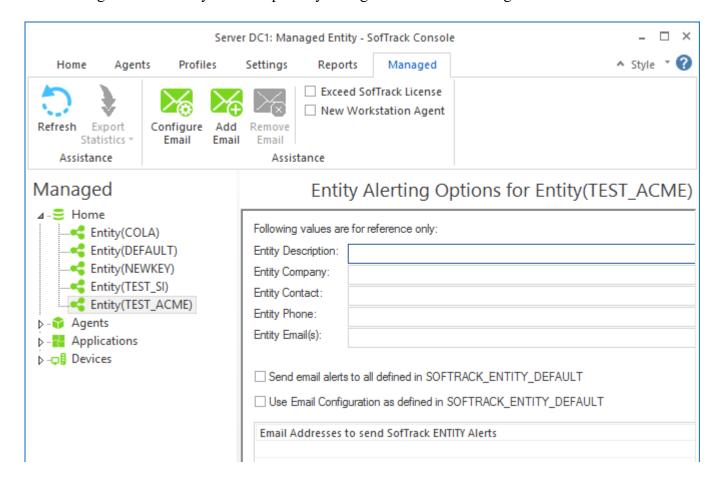
Find each line that includes "TotalLicenses", add each (if more than one) for all "KeyPackId=3" sections

https://docs.microsoft.com/en-us/windows/win32/termserv/win32-tslicensekeypack

The result is the total number of Microsoft® session RDS/CAL licenses installed.

Agent Licensing Errors and Email Alerting

Each Managed Assets Entity can be separately configured for email alerting.



Each Entity can be configured with its own separate email configuration and list of destination emails. And, as shown, the alerts can be defaulted to the definition of the DEFAULT entity (SOFTRACK ENTITY DEFAULT).

The reference values will only be shown on the screen above, each is not currently used for any other purpose.

The checkboxes "Exceed SofTrack License" and "New Workstation Agent" a configurable. There are other alerts that are not configurable.

Non-configurable alerts that will always be sent to email addresses defined in the DEFAULT entity configuration:

STSLAM File Excessive Size

Reason: A file matching *.STS found in STLOG\STSLAM larger than 1.9MB Bad filename will be included in the alert Resolution: Contact support@softwaremetering.com

STSLAM File INVALID Size, auto-renamed to .badformat

Reason: A file with invalid data was found in STLOG\STSLAM

Bad filename will be included in the alert

Resolution: Contact support@softwaremetering.com

STSLAM Path Configuration Error

Reason: The SofTrack Server Agent is unable to create the STLOG \STSLAM path and all workstation agent activity will not be received or process.

Resolution: Manually create STSLAM folder in STLOG path.

STSLAM Disabled Workstation Alert

Reason: A workstation agent from a workstation that has been disabled is attempting to transfer activity data and will be rejected.

Resolution: Update the workstation agent for its new entity, or uninstall the workstation agent on the named workstation (name included in the alert).

Exceed SofTrack License will always be sent to both the email addresses defined for the affected Entity as well as any email addresses defined in the DEFAULT entity configuration:

No Licenses Alert

No Managed Assets licenses are installed (or any installed are expired) and all activity data from all agents is being blocked.

No TS Licenses Alert

Workstation agents using Session licenses are found and were previously licensed. This alert indicates no Managed Assets Session Licenses are currently installed, all have been removed or have expired.

- LX1 Activity data from a workstation agent installed on a non-Windows® terminal server machine was BLOCKED due to insufficient Managed Assets Workstation licenses installed.
- **LX3** Activity data from a workstation agent installed on a Windows® terminal server was BLOCKED due to insufficient (or no) Managed Assets Session licenses installed.
- **LX4** Count of number of unlicensed ST_SLAM (Managed Assets) journal files found This error will occur once per day between midnight and 1am

This error indicates there are insufficient Managed Assets licenses and journal files are not being transferred to SQL.

LX5 – Count of number of unknown Entity ST_SLAM (Managed Assets) journal files found. This error will occur once per day between midnight and 1am on any day there are files present in the STLOG\STSLAM\no-entity-db folder.

This error indicates journal files are present in the server's STLOG\STSLAM\no-entity-db path; the files found there have an Entity configured that has no matching Entity SQL Database (i.e the named database cannot be opened due to it not being present). The filename should indicate the Entity name that is missing. If an Entity Database is added after workstations began uploading their journals, these files must be manually moved to the STLOG\STSLAM folder and presuming sufficient licenses are installed, each will be

transferred to the appropriate SQL Database.

Files will be transferred to the STLOG\STSLAM\no-entity-db when the named entity (first part of the filename) is not present. This indicates the SofTrack SQL Transfer Agent (SQLSTSXF.EXE) was able to connect to the configured SQL Server but unable to open the named SOFTRACK ENTITY database. Reasons for this include the named database does not exist, is offline or SQL Server itself is in "maintenance mode" of some type that prevents the named SOFTRACK ENTITY database from being opened. Once the SQL Server and SOFTRACK ENTITY database(s) are back online, move (not copy, but move) the files from STLOG\STSLAM\no-entity-db to STLOG\STSLAM (i.e. up one level) and those files should be processed into SQL as expected.

LX6 – Count of number of *stsSQL ST_SLAM (Managed Assets) journal files found that have not yet been processed.

This error will occur once per day between midnight and 1am

This error indicates there is likely a problem inserting records into the selected SQL Server and journal files are not being transferred to SQL. This error only occurs when there is, on average, more than 100 pending *stsSQL journal files per licensed workstation (or, during an evaluation, more than 10,000 such files). The log file SQLSTSXF.LOG, found at the SofTrack Server Agent host path (typically c:\windows\syswow64\drivers), should be sent to support@softwaremetering.com for review and further assistance.

IMPORTANT:

Anytime a Managed Assets License Error occurs, the affected activity data will remain unprocessed in the STLOG\STSLAM folder. The data is not lost or removed and will be fully processed once the appropriate Managed Assets license is installed.

New Workstation Agent alerts include:

STSLAM New Agent identified

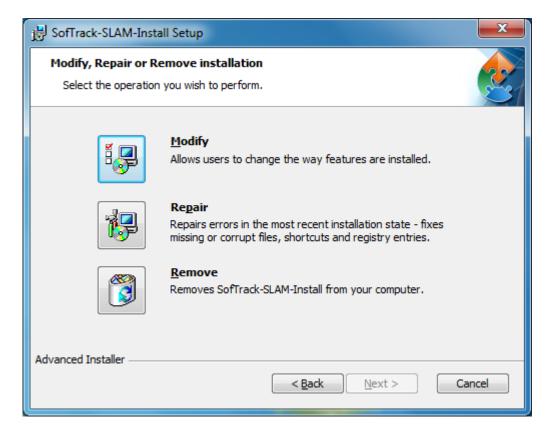
Alert will include name of Entity, workstation and machine GUID

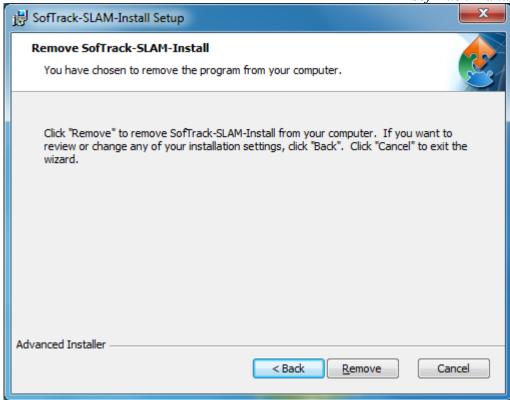
MSI Removal

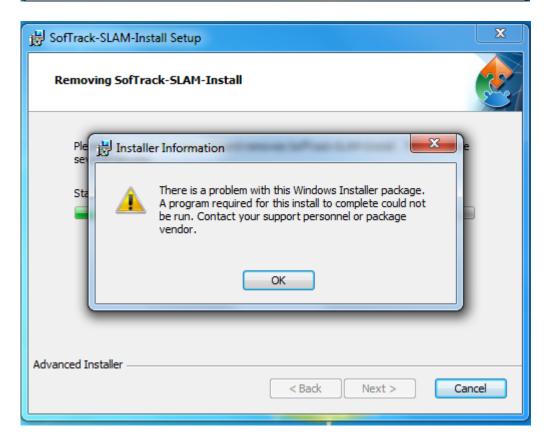
Administrator permissions are required when removing the STSLAM agent via the MSI's Remove option. This requirement is intentional to prevent standard users from being able to remove the agent.

When the MSI is directly run the following order of screens will be presented:









The MSI will not remove the agent when directly run (the error shown above, or similar, will occur). The only method to remove the agent requires opening a CMD window "As Administrator" and directly using MSIEXEC.

The procedure is to click Windows Start, and run CMD.EXE "right click" and select "Run as administrator". At the resulting command prompt, change directory to where the MSI file is located.

Next, enter the command (replacing the msi filename shown with the actual filename):

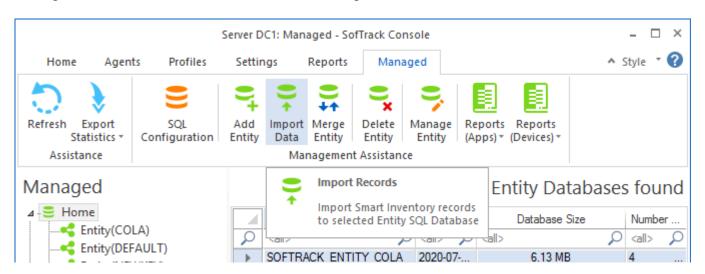
MSIEXEC /x stslam-install-EntityName.msi

This method will present a simple series of windows and once complete (may take up to 2 minutes to complete), the agent's files, its service and any journal files in ST_SLAM.ASL path will be removed. The files SMA_32.DLL and SMA_64.DLL will remain until the next PC reboot, those files will then be removed at that time.

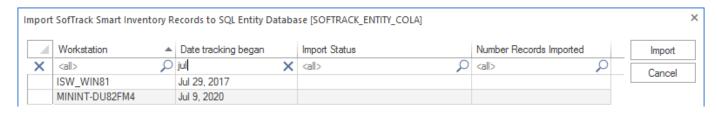
Import Data from SofTrack LWA Control Data

If your SofTrack installation includes software metering control (via the SofTrack Local Workstation Agent (LWA) of that separate product) and workstation audit activity, it is possible to import those existing records into any existing Managed Assets Entity. No Managed Assets license is required to perform this action or receive reports. Your existing SofTrack license that enabled the gathering of this data provides authorization for this ability.

To begin, click on the Home section and click the Import Data button:



A prompt will appear that presents a complete list of all workstations available for importing:



Select the desired workstations. To select all, click the top left box (next to the column title 'Workstation'). Once selected, click the Import button. The import will commence and the columns 'Import Status' and 'Number Records Imported' will populate as the import progresses. Once complete the Import Status will indicate it has completed. The import action occurs in parallel so all workstations are simultaneously processed.

The import function creates a series of *.STS files in the STLOG\STSLAM folder. Each file will automatically be processed by the SQLSTSXF.EXE processed into the appropriate Entity database.

If the Import is performed when the SofTrack Server Agent is not active, the data will be transferred into SQL the next time the SofTrack Server Agent is active.

The data can be imported more than once (will not be duplicated within the same Entity database) into different Entity databases as required.

Only activity related to installed applications as identified by SofTrack's Quick Inventory will be imported.

The data imported will appear in usage activity Reports, but will not include exit time, idle time or active time, only the start time will be shown. And, the Machine GUID value will be shown as NO_MGUID and on the Agents Entity section, the Agent version will be shown as SI_IMP (Smart Inventory Import). If the workstation also has the Managed Assets STSLAM Agent installed, the records will not be combined but you can use the column filter option available in most reports to assist in isolating a specific workstation by its name regardless of the Machine GUID value.



Starting SOFTRACK CONSOLE.EXE

The SOFTRACK_CONSOLE.EXE Administrator tool is the central tool to configure and report SofTrack usage. SOFTRACK_CONSOLE.EXE can be run from any Windows desktop that has access to the servers(s) to manage.

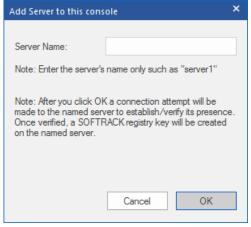
When starting SOFTRACK_CONSOLE.EXE, it will refer to the following local workstation's registry key:

HKEY_CURRENT_USER\Software\Integrity Software, Inc.

This key is created and maintained by SOFTRACK_CONSOLE.EXE. Within this key the value of the last tab you viewed is stored. Also stored are all servers you have configured with SOFTRACK_CONSOLE.EXE. Therefore, if you use SOFTRACK_CONSOLE.EXE on a different workstation you may not see the expected list of servers. You can easily add servers by clicking the following button on the Home page, Home section:



The following prompt will appear:



Registry Key Added at Server Host

When SOFTRACK_CONSOLE.EXE connects to a Windows server, it will automatically attempt to create a registry key. The key created will be

HKEY LOCAL MACHINE\Software\Integrity Software, Inc.

Several other keys will be created underneath this key. If the registry key already exists, it

will not be recreated or otherwise altered.

Backing up SofTrack License Profile and Configuration Definitions and Activity Data

To back up/archive SofTrack's License Profile Definitions and other configuration details:

- **1** At the server host, open REGEDIT.EXE.
- **2** Open the registry key:

```
HKEY LOCAL MACHINE\Software\Integrity Software, Inc.
```

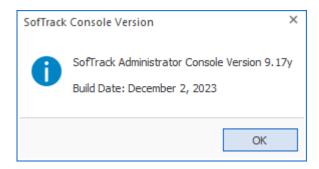
- **3** From the menu, select **File** and then **Export...**
- 4 Save to a file of your choice

To back up/archive SofTrack's Metering Activity Data:

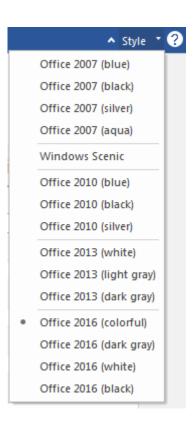
• Back up with WinZip or another archiving utility the contents, including all subdirectories, of the directory selected to be the METER. LOG path.

About and Visual Style

To view the version of the SOFTRACK_CONSOLE.EXE, click on the? found at the upper right corner:

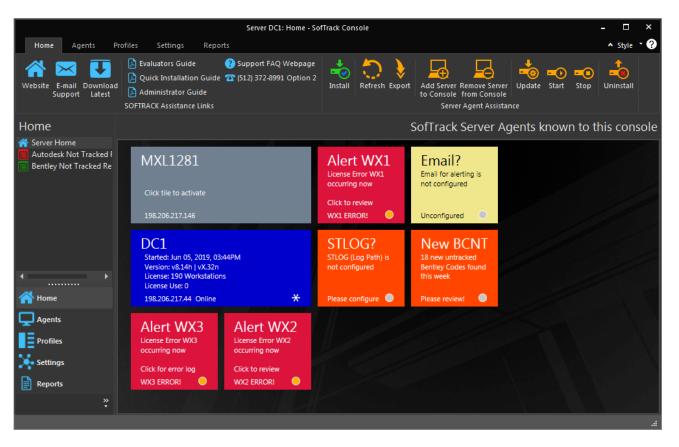


To adjust the Visual Style of the SOFTRACK_CONSOLE.EXE, click on the ^Style item at the upper right and a drop down menu will appear, select the visual look. The default style is "Office 2016 (colorful)".

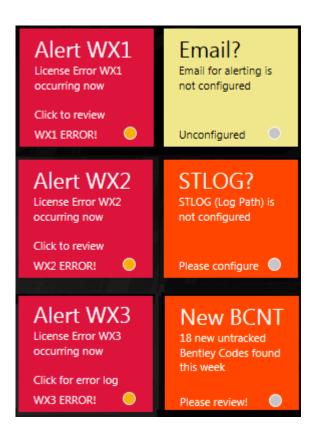


Alert Tiles

The SofTrack Console has several Alert Tiles that may appear in the Home section of the Home tab:



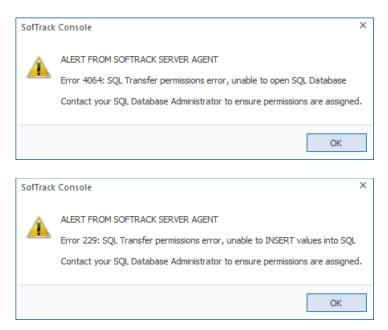
These Alert Tiles are clickable. Each will change the view to the appropriate section.

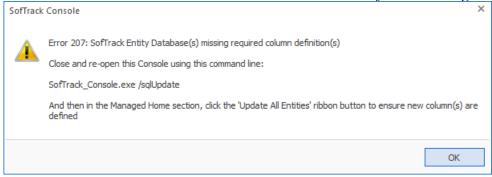


In addition to the Alert Tiles shown above, there is another that has a blue background that will remind you when your SofTrack License will expire within the next 30 days.

Pop-up SQL Errors

When starting the SofTrack Console, if any SQL Errors are detected in the <u>SQLSTSXF.LOG</u>, (3) possible pop-up errors can occur, 4064, 229 and 207:





If the Console remains open for 6 hours, it will re-check and the error popups can re-occur. This is repeated every 6 hours as long as the Console remains continuously open.

Once the error situations are resolved, the error pop-ups can re-occur. To prevent further pop-ups error messages for resolved issues, delete the SQLSTSXF.LOG, <u>click here to review its</u> location.

Administrative Options

The balance of this chapter will discuss the options required to configure the server host for use by SofTrack via the SOFTRACK CONSOLE.EXE application.

Set Log Share Path

Set Log Share Path: Overview

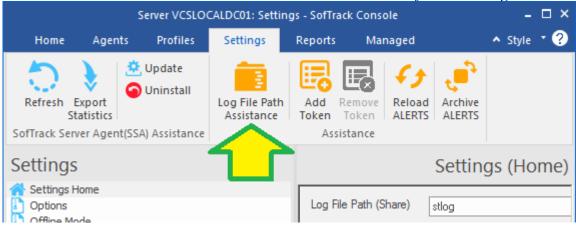
The Log Share Path file is the repository of SofTrack's activity data including temporary storage of workstation activity transmitted by the STSLAM agent at each workstation.

Do not specify a local path such as C:\SOFTRACK for the Log Share path.

Set Log Share Path: How

Open SOFTRACK_CONSOLE.EXE and select the desired server then click the "Settings" tab, select the *Settings Home* section and enter the desired path the Log File Path (Share) edit field or use the Path Assistance button to locate the desired share.

- There is no default path.
- Be sure the path includes the Public Share name and, if required, directory path within that Public Share.
- If the path is erased, no data will be recorded to SQL Server.
- Path selected must be located on the server hosting the SofTrack Server Agent



Token Maintenance

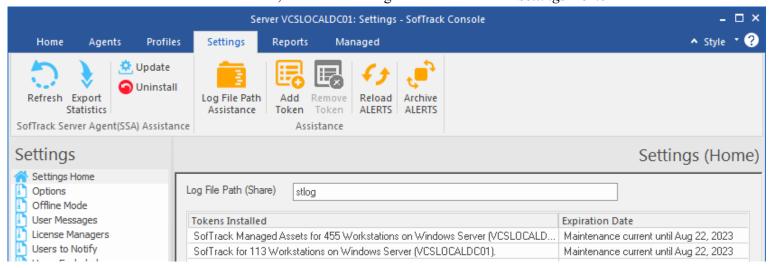
Token Maintenance: Overview

SofTrack's usage rights are governed by the token you purchase. For SofTrack to recognize your token, you must install it on the server(s) it was purchased for, where the SofTrack Server Agent (SSA) is or will be in use. The SSA does not need to be active to install or remove the token(s). If you have previously installed an evaluation token, it will automatically be removed once it expires.

The SofTrack token only determines how the SSA performs. Maintenance of the SofTrack token does not affect or in any way modify the activity data SofTrack has recorded. Likewise, maintenance of the SofTrack token will not alter any other definitions you have established.

Token Maintenance: How

- 1 Open SOFTRACK_CONSOLE.EXE.
- 2 Select the desired server, click the "Settings" tab and select the Settings Home section.

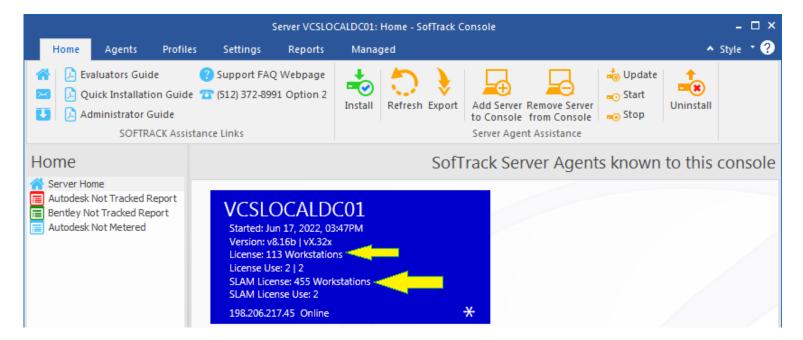


The above figure indicates 2 tokens are currently installed. The installed tokens listed will be all the tokens that have been installed for the current server. Remember, the SofTrack Server Agent does not need to be active to perform token maintenance.

To install your token, click the **Add Token** button at top of the screen. A new window will appear to assist in locating your token file to install.

Typically, you would only remove a token if it is expired.

To verify that the SofTrack Server Agent recognizes the token(s) you have installed, watch for the token details on the selected server's tile on the main screen of SOFTRACK CONSOLE.EXE.



NOTE: The token details are only present when the SSA is active.

Email Alerts

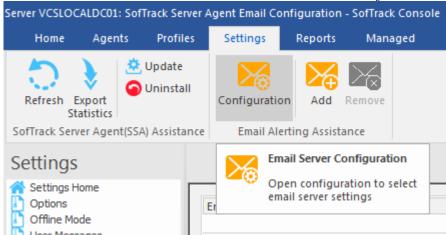
SofTrack includes the ability to send an Email for each alert activity. Beyond specifying the Email Server configuration, the following alerts require no specific configuration:

- SofTrack Server Agent starting
- o SofTrack Server Agent stopping
- SofTrack Server Agent licensing violation (over deployed or not licensed)

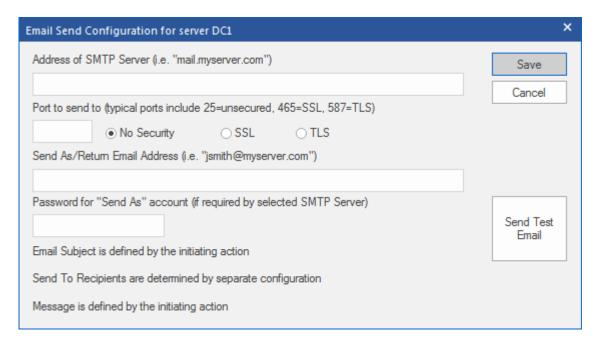
Each Email Alert sent has a descriptive email subject and the email body includes relevant details including when the event occurred.

Email Alerts: How

The Email alerts option allows you to receive Alerts from the SofTrack Server Agent to email address(es) you specify.



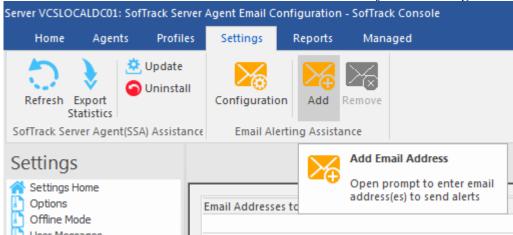
To begin, click the Settings tab and select the *Email Alerting* section as shown above and then click the **Configuration** button. The following window will appear:



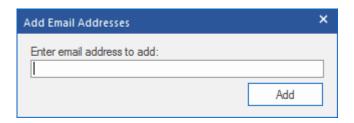
Each field shown above must be filled in. Once all fields are completed, click the **Send Test Email** button to verify your configuration. Click **Save** button when complete. The password value is encrypted before being saved.

Notice there is no "disable" option, if you ever need to stop sending email alerts there are two methods. The first is to erase the configuration and click **Save**. The second is to erase the list of email addresses (defined in next section). Once you click the **Save** button, the configuration is saved to the server hosting the SofTrack Server Agent.

When ready, enter an email address and click the **Add** button as shown below.



The following prompt will appear:



Enter an email address and click the **Add** button. Once complete, click the "x" at the upper right corner.

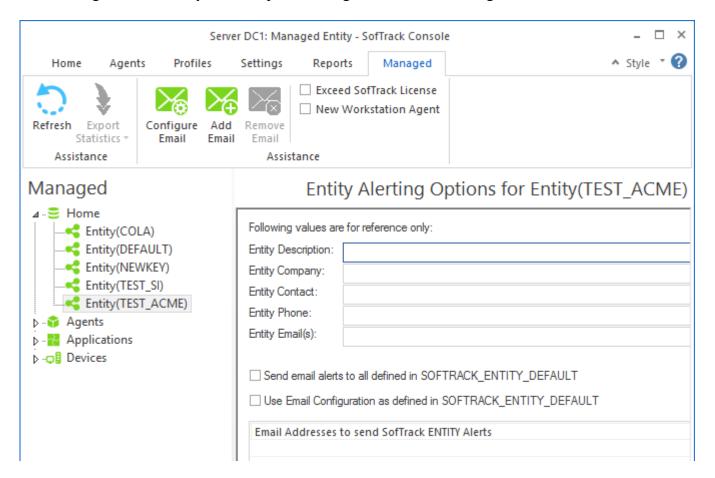
The email address will be added to the list. There is no limit on the number of email addresses you can enter. The email addresses added are immediately saved and the SofTrack Server Agent silently updated.

Email Alerts: SofTrack Server Agent

When Email Alerts are configured the SofTrack Server Agent will start a second STSRVC.EXE process. There will then either be (2) STSRVC.EXE processes or one STSRVC64.EXE and one STSRVC.EXE process. The second process (process name will always be STSRVC.EXE) will send the emails. Therefore, if you look in Task Manager at the server hosting the SofTrack Server Agent and see 2 processes, this is expected and normal. The file DSRRSMTP.DLL is used by STSRVC.EXE when ending emails.

Email Alerts: Entity Agent Licensing Errors and Alerting

Each Managed Assets Entity can be separate configured for email alerting.



Each Entity can be configured with its own separate email configuration and list of destination emails. And, as shown, the alerts can be defaulted to the definition of the DEFAULT entity (SOFTRACK ENTITY DEFAULT).

The reference values will only be shown on the screen above, each is not currently used for any other purpose.

The checkboxes "Exceed SofTrack License" and "New Workstation Agent" a configurable. There are other alerts that are not configurable.

Non-configurable alerts that will always be sent to email addresses defined in the DEFAULT entity configuration:

STSLAM File Excessive Size

Reason: A file matching *.STS found in STLOG\STSLAM larger than 1.9MB Bad filename will be included in the alert Resolution: Contact support@softwaremetering.com

STSLAM File INVALID Size, auto-renamed to .badformat

Reason: A file with invalid data was found in STLOG\STSLAM

Bad filename will be included in the alert Resolution: Contact support@softwaremetering.com

STSLAM Path Configuration Error

Reason: The SofTrack Server Agent is unable to create the STLOG\STSLAM path and all workstation agent activity will not be received or process. Resolution: Manually create STSLAM folder in STLOG path.

STSLAM Disabled Workstation Alert

Reason: A workstation agent from a workstation that has been disabled is attempting to transfer activity data and will be rejected. Resolution: Update the workstation agent for its new entity, or uninstall the workstation agent on the named workstation (name included in the alert).

Exceed SofTrack License will always be sent to both the email addresses defined for the affected Entity as well as any email addresses defined in the DEFAULT entity configuration:

No Licenses Alert

No Managed Assets licenses are installed (or any installed are expired) and all activity data from all agents is being blocked.

No TS Licenses Alert

Workstation agents using Session licenses are found and were previously licensed. This alert indicates no Managed Assets Session Licenses are currently installed, all have been removed or have expired.

- LX1 Activity data from a workstation agent installed on a non-Windows® terminal server machine was BLOCKED due to insufficient Managed Assets Workstation licenses installed.
- **LX3** Activity data from a workstation agent installed on a Windows® terminal server was BLOCKED due to insufficient (or no) Managed Assets Session licenses installed.
- **LX4** Count of number of unlicensed ST_SLAM (Managed Assets) journal files found This error will occur once per day between midnight and 1am

This error indicates there are insufficient Managed Assets licenses and journal files are not being transferred to SQL.

LX5 – Count of number of unknown Entity ST_SLAM (Managed Assets) journal files found.

This error will occur once per day between midnight and 1am.

This error indicates journal files are present in the server's STLOG\STSLAM\no-entity-db path; the files found there have an Entity configured that has no matching Entity SQL Database. The filename should indicate the Entity name that is missing. If an Entity Database is added, these files must be manually moved to the STLOG\STSLAM folder and presuming sufficient licenses are installed, each will

be transferred to the appropriate SQL Database.

LX6 – Count of number of *stsSQL ST_SLAM (Managed Assets) journal files found that have not yet been processed.

This error will occur once per day between midnight and 1am

This error indicates there is likely a problem inserting records into the selected SQL Server and journal files are not being transferred to SQL. This error only occurs when there is, on average, more than 100 pending *stsSQL journal files per licensed workstation (or, during an evaluation, more than 10,000 such files). The log file SQLSTSXF.LOG, found at the SofTrack Server Agent host path (typically c:\windows\syswow64\drivers), should be sent to support@softwaremetering.com for review and further assistance.

IMPORTANT:

Any time a Managed Assets License Error occurs, the affected activity data will remain unprocessed in the STLOG\STSLAM folder. The data is not lost or removed and will be fully processed once the appropriate Managed Assets license is installed.

New Workstation Agent alerts include:

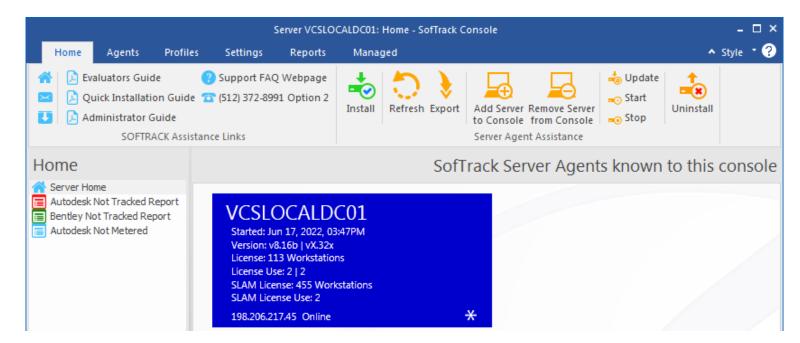
STSLAM New Agent identified

Alert will include name of Entity, workstation and machine GUID

SofTrack Server Agent Version

SofTrack Server Agent Version: How

Open SOFTRACK_CONSOLE.EXE, there will be a tile for each server that has been added to the Console. The currently selected server will list its current agent details on its tile:



The **Started** value indicates when the Agent was loaded/started.

The **Version** values indicate the version of the agent's two main components.

The **License** values indicate the type and size of the license(s) installed and current usage. These license value(s) are for SofTrack's License Control and will be zero if only using SofTrack Managed Assets.

The **SLAM License** values indicate the type and size of the Managed Assets license(s) installed and current usage.

The last line indicates the **IPv4** address used by the SofTrack Server Agent at the indicated server and **Online** indicates if the server itself is reachable (or not). The **Online** designation does not indicate the SofTrack Server Agent is active, you must also see the **Started**, **Version** and **License** and/or **SLAM License** values.

SofTrack Server Agent Version: Cannot connect?

If you only see the **Online** value (in the above image) and **not** the **Started**, **Version** and **License** or **SLAM License** values, be sure that your workstation, server or any intermediate network switch or other does not have a firewall blocking ICMP Ping activity and that Reverse IP Lookup is not being actively blocked.

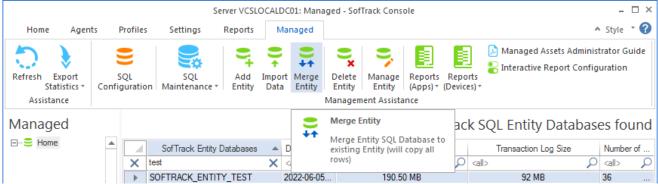
Merging Entities

When the need to combined Entities occurs, use the Merge Entity function. Both the source and destination Entities must already exist though there is no requirement for the destination Entity to have any data. If any duplicate records are present (existing in both Entities) the duplicates will not be merged as the value already exists.

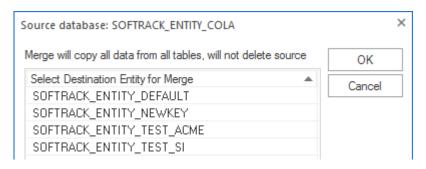
The merge function does not delete any data in either Entity SQL Database.

It is presumed the source Entity is inactive, that is, activity is not being transferred from workstation activity gathered by the STSLAM agent because all workstation agents have either been removed or have had the Entity to report to modified to be another Entity. If this is not true, the Merge can be performed multiple times, duplicate records will never occur; only unique records will be inserted into the destination Entity SQL database.

To begin, select the Entity to be merged with another:



Next, click the Merge Entity button and the following prompt will appear:



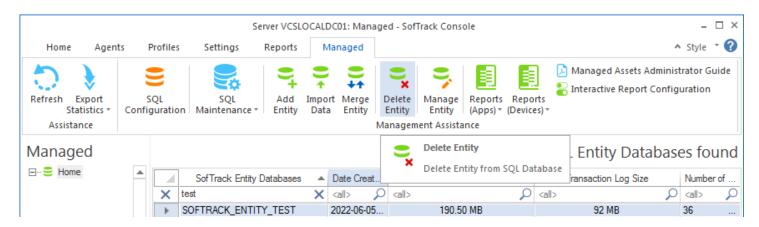
Select the destination for the merge and then click OK. A progress window will appear detailing each merge action.

Deleting an Entity

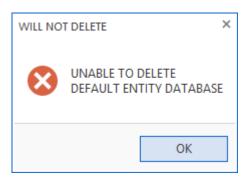
Once a Managed Assets Entity has been fully decommissioned and its data merged into other Entity's SQL Database or is no longer relevant, the Delete Entity function will:

- Completely remove that Entity's SQL Database and all Tables;
- Disable all Agents associated with that Entity so each will no longer be using a SofTrack Managed Assets license
- Remove registry entries associated with that Entity (i.e. Email configuration, alert emails)

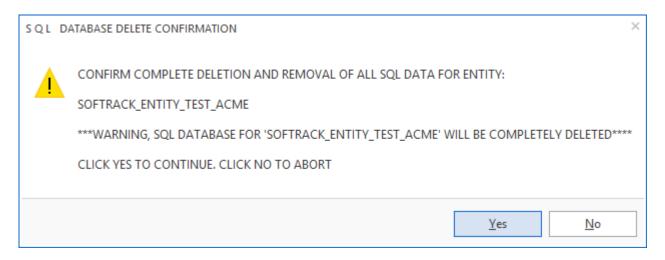
To begin, select the Entity to completely remove:



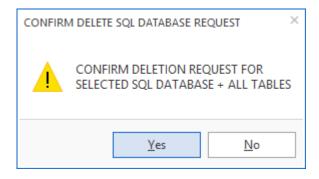
If you select the DEFAULT Entity, the delete function will be blocked:



Otherwise, the following confirmation prompt will be presented:



If confirmed, a second confirmation prompt will be presented:



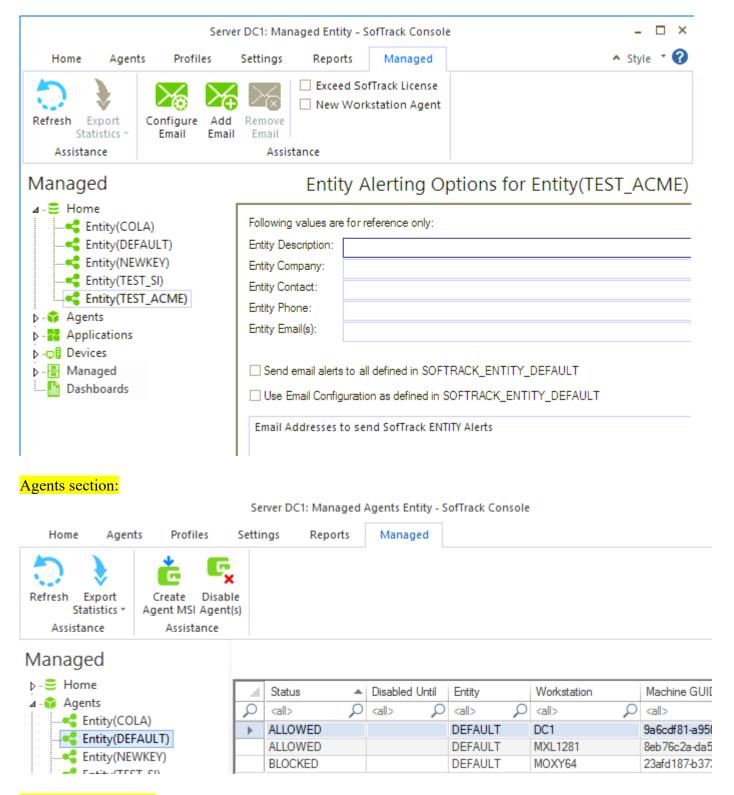
If confirmed, the Entity's SQL Database and all Tables and data will be completely removed.

Managing an Entity

The SofTrack Console has two methods to manage a specific Entity. The first is found on the left side menu, select each and open revealing all known Entities. The following series of screenshots show those side menus, notice the buttons in the Ribbon bar, these are used to make changes to each Entity:

Home section:

Entity Email Configuration



Applications section:

Devices for Entity(COLA)

2021-04-02 13:03:16

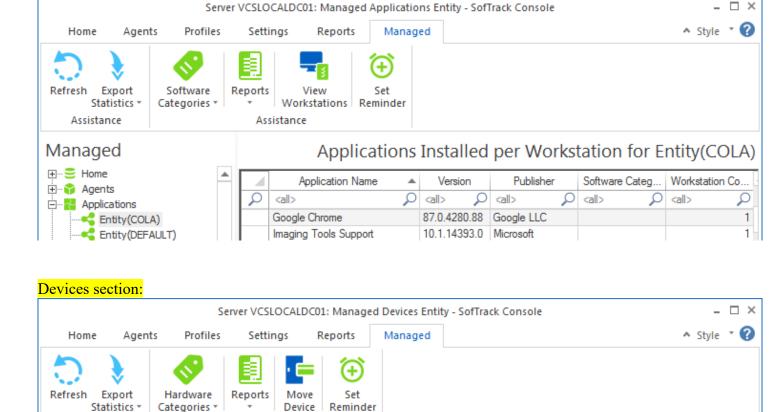
Last I

2021-

Q

Last Reboot

Ω (all>



Machine GUID

Ω (all>

DESKTOP-EBQG6RR 95e63525-93d8-414f-...

Category

Ω (all>

The second method to manage an Entity is found on the Home view, selecting an Entity and clicking the Manage Entity button:

Assistance

Q

Workstation

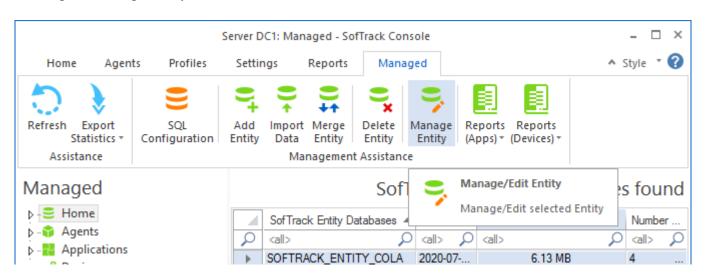
<all>

Assistance

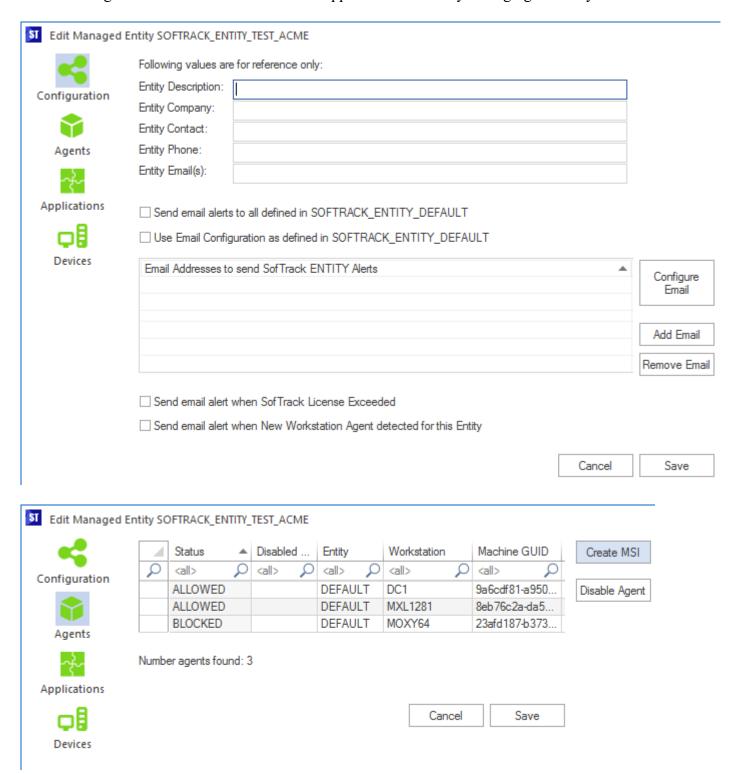
⊡...**□** Devices

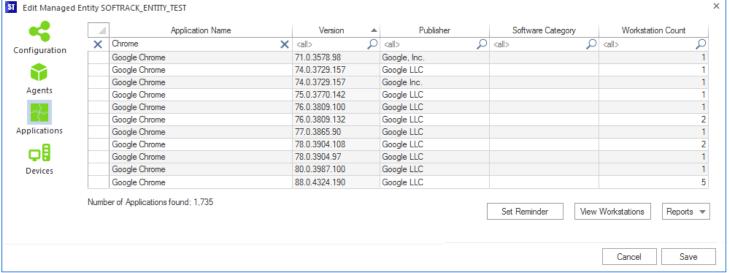
∴ Applications

Entity(COLA)

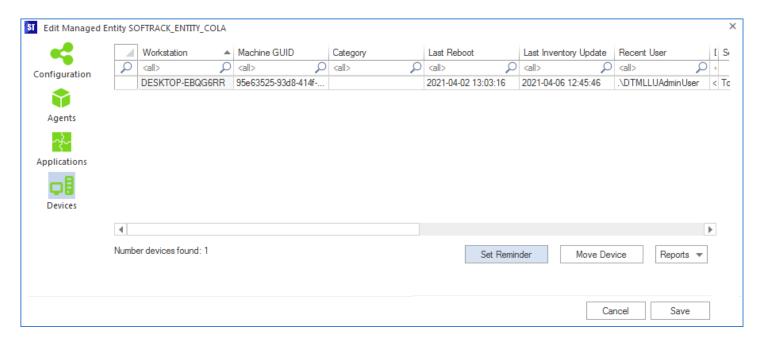


The following series of screenshots show what appears when directly managing an Entity:





Note: the Number Applications found indicates the number of rows found, there can be duplicate applications if the same application is installed with multiple versions. To view the specific workstations for any selected applications, click the View Workstations button to receive a new report.



Software Categories (Normalization)

Found in the Applications section, the Software Category button enables defining of an unlimited number of categories and the ability to assign a category to any application. Each application can only belong to a single Software Category, the assignment can be changed as needed.

SofTrack's Software Categories provides the ability to "normalize" software applications to the needs of your organization. Instead of presuming to normalize software applications based on a set of previously identified connections, SofTrack's Software Category provides your organization the ability to associate applications together as needed. Several concurrent usage

and utilization reports are provided that utilize software categories enabling cohesive reporting of related applications as required.

By assigning Software Categories, each unassigned application can be quickly located. Once an application has been assigned to a Software Category all its usages including past and future usages will immediately be associated.

In addition to typical "normalizations" such as "Adobe Creative Suite", specific assignments such as "Games", "Unknown", "Shareware", "Remove" can be made as required.

The Software Category definitions are stored in the Windows® registry of the SofTrack Server Agent host. The categories are customizable by the customer. Each application assigned a software category has that relationship stored in a SQL Table unique to the SOFTRACK_ENTITY_DEFAULT SQL Database (INVENTORY_APP_TAGS).

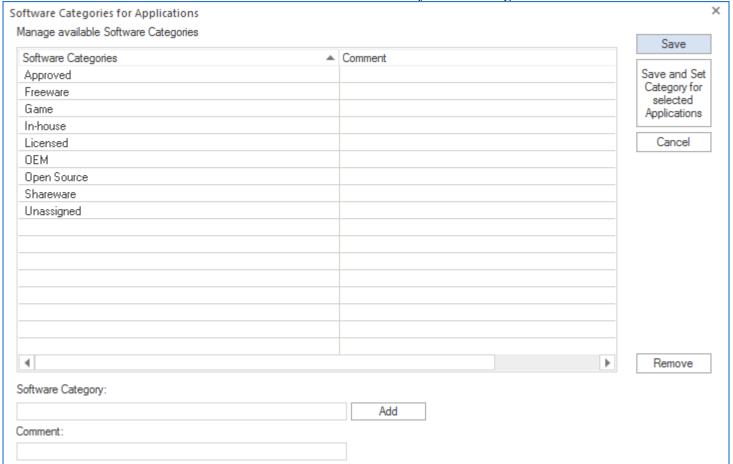
Software Categories are designed to be used "in common" between all Entites. Therefore, software categories are common throughout all Entities and once established for a specific application, that application will be associated with that software category regardless of the Entity where found/used.

SofTrack provides a set of default categories, each can be removed or retained and new ones created. There is no limit on the number of Software Categories that can be created and used.

To start, click the Software Categories button, this button will only be enabled when one or more applications are selected in the list below (list of application is not shown in next image):



Select the Manage Software Categories link to view the available categories:



The values shown above are the default categories.

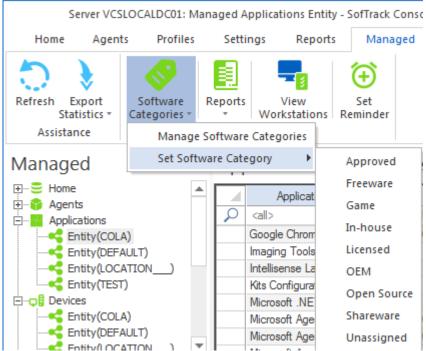
When the list of Software Categories is Saved, each Category and its Comment is stored in the Windows® registry of the SofTrack Server Agent host. The Comment field is free-form to enable any further details of the selected Software Category.

To set the Software Category for a specific application(s), select the application(s) and then click the Software Categories button and select the Set Software or Select Software Category for set menu and then click the desired category. When there are 20 or fewer Software Categories defined a drop down list (as shown below) is used. When there are more than 20 Software Categories a pop-up screen is provided.

Once the Software Category is selected, you can double click the Software Categories button to directly set the Software Category for all selected Applications. An Application's Software Category can be changed as required.

Note:

If a Software Category is changed or removed, all applications previously identified will continue to show the now deleted (changed/removed) value. Those applications must have their Software Category re-established if the new value is to be realized (i.e. in Reports).



The Application Usage reports utilize Software Categories:

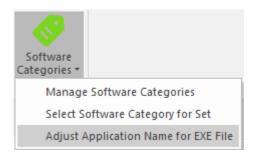
- ➤ Concurrent Usage
- ➤ Dashboard Maximum Daily Concurrent Application Usage
- Dashboard Application Usage per Workstation

Adjust Application Name for Software Usage

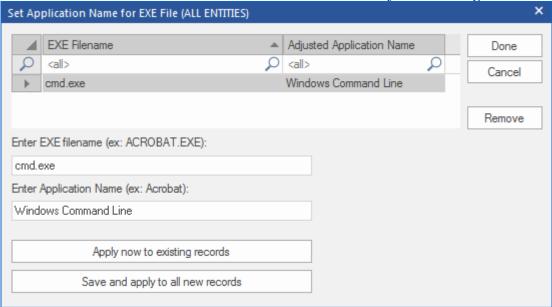
The Application Name shown in Software Usage reports is based upon the software inventory reporting. However, there are applications where the Application Name is blank, for example, Windows default tools such as CMD.EXE, NOTEPAD.EXE and others. And, sometimes the EXE filename detected during software usage is associated with multiple installed applications, for example, Acrobat.exe is part of several Adobe® applications.

The Application Name is used when defining Software Categories. To provide assistance in associating a specific EXE filename with an Application Name, please refer to the following:

Click on the Software Categories ribbon button:



The following window will appear:

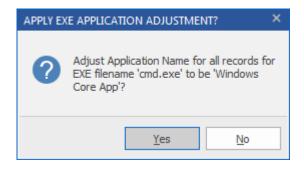


In the image above, the "cmd.exe" is already defined, the first usage will have no entries, there are no default entries.

Notice, there are 2 buttons, *Apply now to existing records* and *Save and apply to all new records*, these buttons provide two separate, mutually exclusive functions.

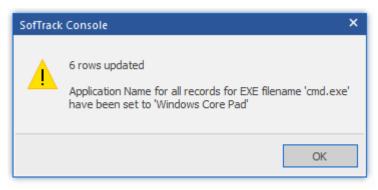
The Apply now to existing records button will immediately change all records in the ALL_SOFTWARE_USAGE table for the current Managed Applications Entity, or, if viewing all Entities, then will be applied to all Entities.

When you click the *Apply now to existing records* button a confirming prompt will appear:

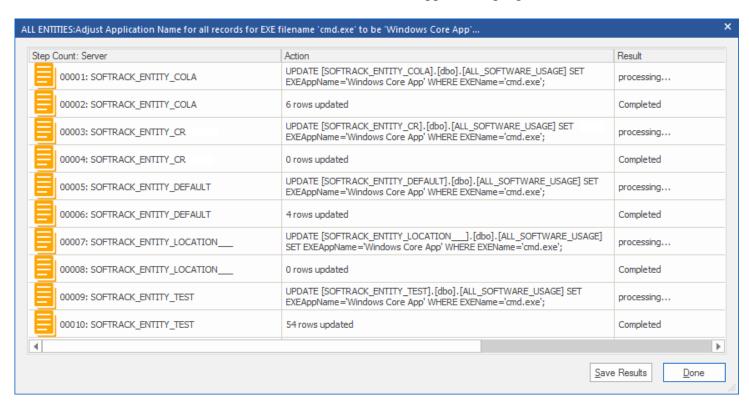


To continue, click Yes.

When complete, a result will appear:



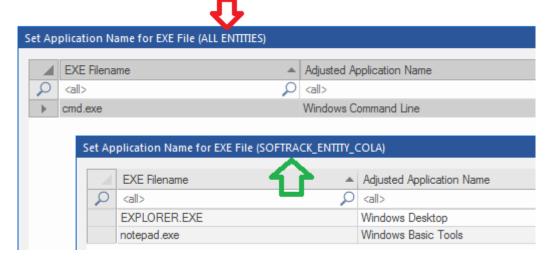
If the current selection is for all Entities, instead the result will appear as a progress window:



The second button, *Save and apply to all new records*, does not change existing records in the ALL_SOFTWARE_USAGE table, instead, it saves the EXE filename and Application name and future records, as they are being imported to SQL, will have the Application name changed.

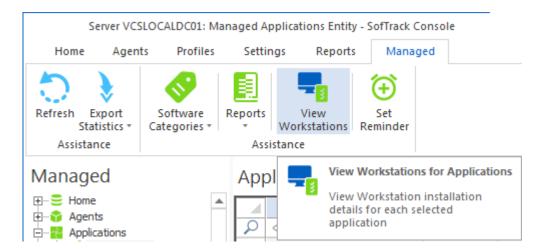
There is no limit on the number of EXE filenames that can have a new Application Name automatically set.

The EXE filename values are either for ALL ENTITIES including future ones that do not yet exist, or for a specific Entity. The current setting is shown in the Windows caption bar:

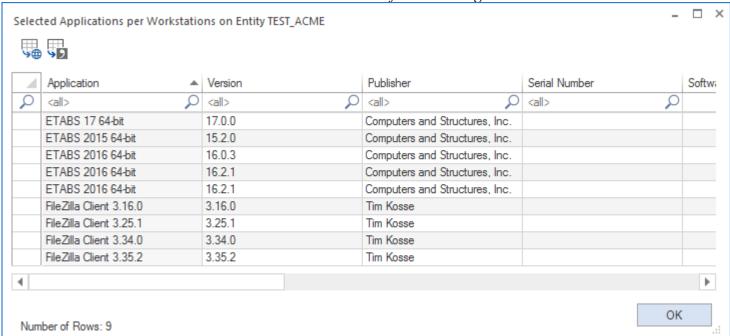


View Workstations

The Applications Entity view lists all applications found including a workstation count for each. To view the workstations, select any number of applications (including all) and click the View Workstations ribbon button:

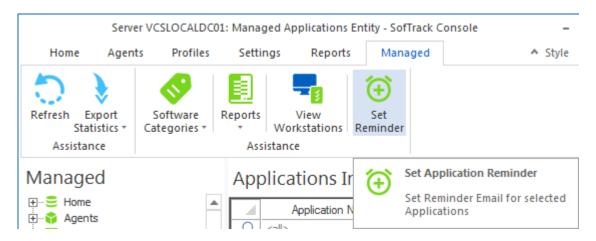


Example report:

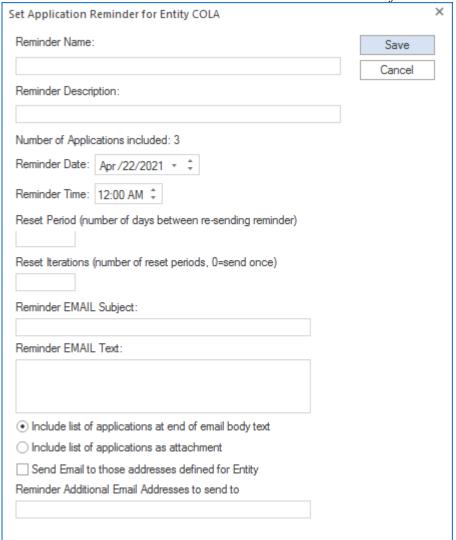


Set Application Email Reminder

The Applications Entity includes the ability to select one or more (no limit) applications to configure an automatic email reminder. To create a Reminder, select any number of applications (including all) and click the Set Reminder ribbon button:



The following window will appear:



Define the Reminder Name, this is free form text up to 120 characters. This name will be referred to within the SofTrack Console. The Reminder Name does not need to be unique, multiple Reminders can have the same Reminder Name, but it is recommended that each Reminder has a unique name.

Next, provide a description, free form text up to 120 characters. This will also only be referred to within the SofTrack Console.

The Number of Applications included indicates how many applications were included. The Applications included are not changeable; if you require a change, create a new Reminder.

Set the initial Reminder Date and Time. This is when the Reminder email will first be sent by the SofTrack Server Agent.

If you want the reminder to be re-sent at selected intervals, define the optional Reset Period and Reset Iterations. Use 0 for these values to send the Reminder once.

Next, define the EMAIL Subject, this is free form text up to 120 characters.

Then define the EMAIL body text, this is free form text up to 900 characters (not including the list of applications).

Then select how to present the list of included Applications, either as text (one line per included Application, Version, Publisher) directly in the email text, or, as a text file attachment.

If checked, the 'Send Email to those address defined for Entity' the list of email addresses configured (at the time the Reminder email is to be sent, not at the time the Reminder is created) for the Entity the Applications are from.

Additionally you can directly specify email address(es) to send the Reminder to (the text field is limited to 900 characters). Use a semi-column (";") to separate multiple email addresses.

Click Save to create the Reminder.

The Reminder is saved to the Windows® registry at the SofTrack Server Agent, it is not stored in SQL.

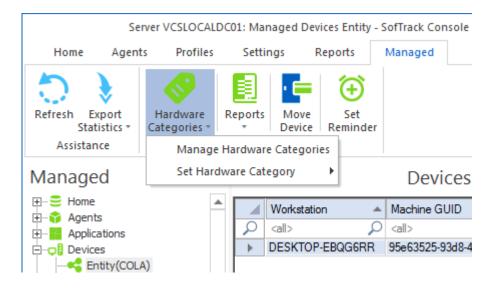
To later edit/remove the Application Reminder, click on the Managed section.

Hardware Categories

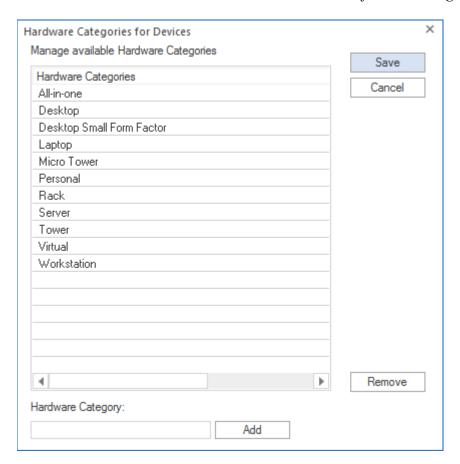
Found in the Devices section, the Hardware Category button enables defining of any number of categories and the ability to assign a category to any device. The Hardware Category definitions are stored in the Windows® registry of the SofTrack Server Agent host. The categories are customizable by the customer. Each device assigned a hardare category has that relationship stored in SQL Table unique to the SOFTRACK_ENTITY_DEFAULT SQL Database (INVENTORY DEV TAGS).

SofTrack provides a set of default categories, each can be removed or retained and new ones created.

To start, click the Hardware Categories button:



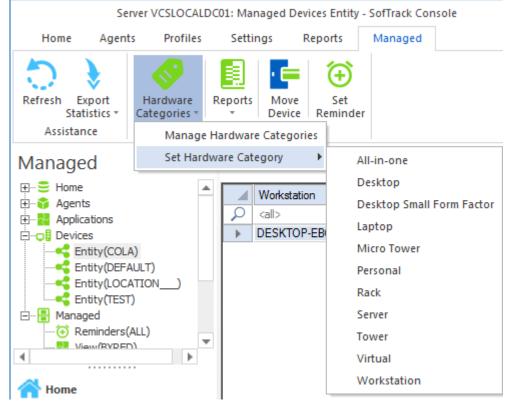
Select the Manage Hardware Categories button to manage the available categories:



The values shown above are the default categories.

When the list of Hardware Categories is Saved, each Category is stored in the Windows® registry of the SofTrack Server Agent host.

To set the Hardware Category for specific devices(s), select the device(s) and then click the Hardware Categories button and select the Set Hardware Category menu and then click the desired category. Once the Hardware Category is selected, you can double click the Hardware Categories button to directly set the Hardware Category for all selected Devices.



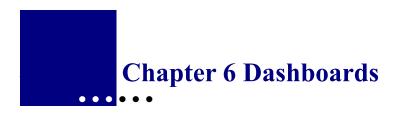
Note:

If a Hardware Category is changed or removed (from the list of available categories), all devices previously identified will continue to show the now deleted (changed/removed) value. Those devices must have their Hardware Category re-established if the new value is to be realized (i.e. in Reports).

Set Device Email Reminder

The Devices Entity includes the ability to select one or more (no limit) applications to configure an automatic email reminder. To create a Reminder, select any number of devices (including all) and click the Set Reminder ribbon button.

Please refer to the previous section, <u>click here for further details</u> (creation of Device Reminders follows the same process as creating Application Reminders).

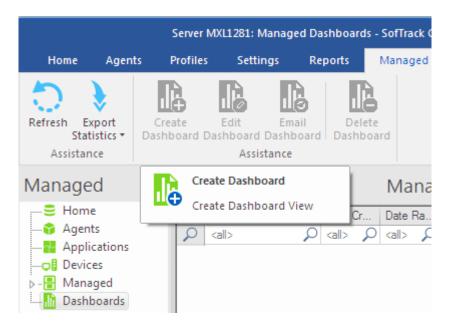


Overview: Dashboards

Within the SofTrack Console is the ability to create Dashboards for viewing of customized charts, each with up to 4 graphs. Each Dashboard can be exported to HTML for easy sharing of vital reports. Additionally, automatic emails of each Dashboard can be individual configured to send Dashboard charts as requested via email at specific dates and times.

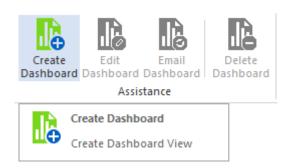
Dashboards

The Dashboards section provides the ability to create customized charts (up to 4 graphs per dashboard) of Application, Device and User data.

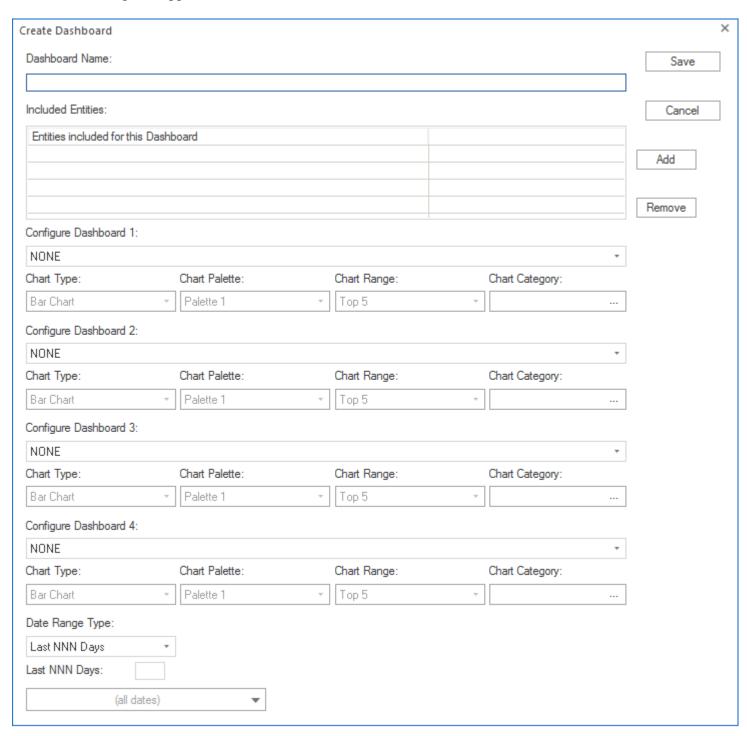


Creating a Dashboard

To create a new Dashboard, click the Dashboards section and click the Create Dashboard ribbon button. Note: this button will be disabled when no SQL Entities exist.



And the following will appear:

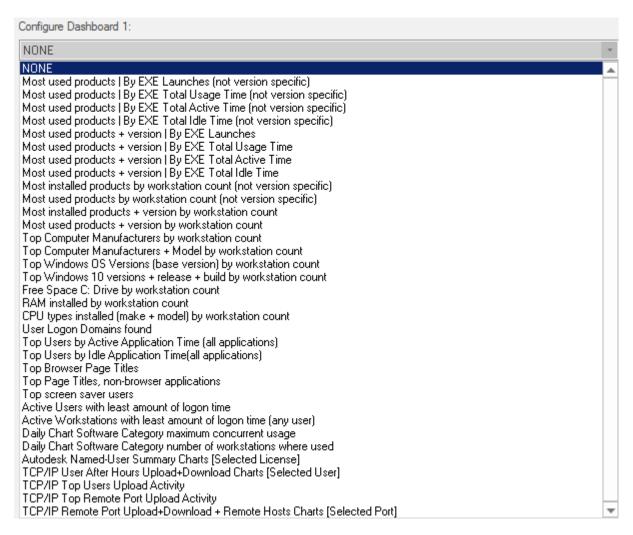


The Dashboard name is free form text up to 126 characters.

The Dashboard must include at least one Entity. The Entity or Entities included will be used as the data source for the Dashboard. Use the "Add" and "Remove" buttons to manage the list of Entities included in the Dashboard. The results from each SofTrack Entity are combined into a single result. The "source" SofTrack Entity is not included in the results detail. If results from a specific SofTrack Entity are required, only select a single SofTrack Entity.

The Dashboard can include up to 4 different charts.

The first is defined in the "Configure Dashboard 1:" section. Click the dropdown list to show the available charts:



The selection "NONE" indicate no chart will be defined for the selected Dashboard configuration.

IMPORTANT NOTE:

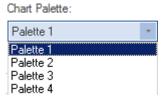
The Autodesk Named-User Summary Charts and the TCP/IP Remote Port Uploaded+Download + Remote Hosts Charts both create 4 charts and these report selections are only available for the Dashboard 1 and when either are selected, the other Chart Positions (2,3,4) are all disabled.

The Dashboard Chart Type has 6 selections: Chart Type:



*Note, the *Daily Chart Software Category*... will always use Bar Chart regardless of selection

The Dashboard Palette has 4 selections.

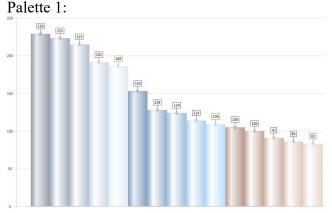


The Chart Category *is only available* for the reports with the name starting the *Daily Chart Software Category*...

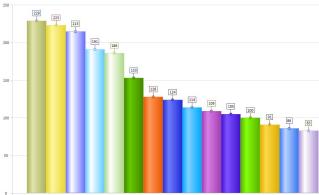


To select the Chart Category, click the "..." as shown above the arrow in the image. Once clicked a window will be opened showing all available Software Categories, select one and it will be automatically indicated in the Chart Category field. Please note, the Chart Category field is read-only and its selection can only be made via this method.

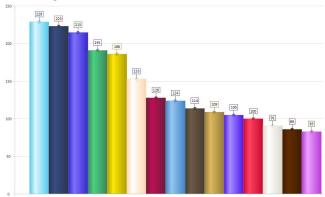
The following show the color range for each:



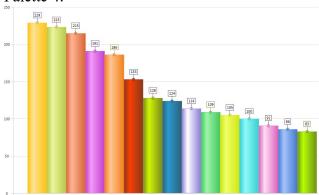
Palette 2:



Palette 3:

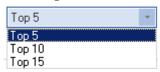


Palette 4:



The Chart Range option identifies the number of items to chart for the selected graph. The options are Top 5, Top 10 and Top 15:

Chart Range:



Up to 4 Charts/Graphs can be configured per Dashboard.

^{*}Note, the *Daily Chart Software Category*... provides values per-day, the Chart Range value is not used for those Charts.

Most of the Charts rely on a date range for report creation. For those reports that use a date range, there are 5 date range configurations:

Date Range Type:



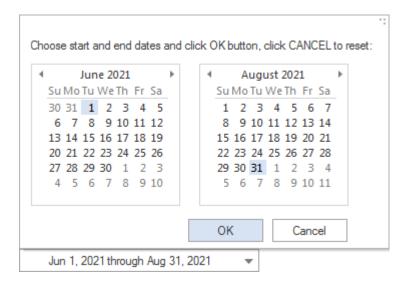
The Last Month, Year-To-Date and Last 12 Months options use the stated date ranges.

The Last NNN Days requires filling in the Last NNN Days prompt:



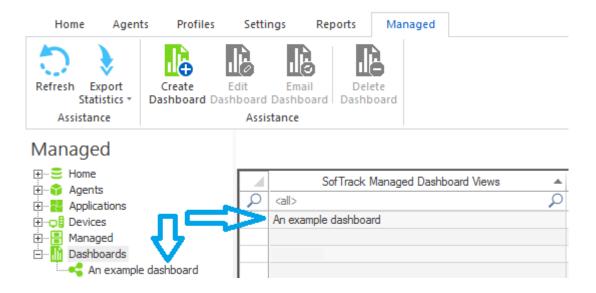
If no value is provided or is zero, the default of 30 days is used. The maximum Days value is 9999.

The Fixed Range option enables the date selector:



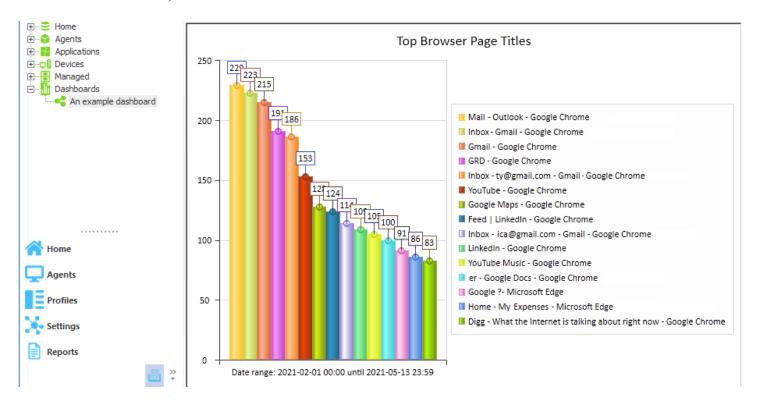
When created, the Dashboard definition is stored in a SQL Table named DASHBOARDS contained within the SOFTRACK_ENTITY_DEFAULT database.

Once created, the Dashboard will be added to the Dashboards left side selections and in the grid listing all created Dashboards in the main Dashboards view:



Viewing a Dashboard

To view the Dashboard, click on its left side selection:



The entire screen appears as follows:

SofTrack Managed Assets Administrator Guide Server VCSLOCALDC01: Managed Dashboards View - SofTrack Console ^ Style ▼ 🕜 Settings Home Profiles Reports Managed Agents Refresh Export Edit Email Dashboard Dashboard Managed Managed Dashboard An example dashboard ±... € Home ⊕ Gents Top Browser Page Titles ÷... Applications 250 ⊕ pevices ⊕ B Managed nashboards < An example dashboard Mail - Outlook - Google Chrome 200 Inbox - Gmail - Google Chrome ■ Gmail - Google Chrome GRD - Google Chrome Inbox - ty@gmail.com - Gmail - Google Chrome 150 ■ YouTube - Google Chrome Google Maps - Google Chrome 10 105 Feed | LinkedIn - Google Chrome Inbox - ica@gmail.com - Gmail - Google Chrome 100 LinkedIn - Google Chrome Home YouTube Music - Google Chrome er - Google Docs - Google Chrome Google ?- Microsoft Edge 50 Home - My Expenses - Microsoft Edge Digg - What the Internet is talking about right now - Google Chrome Settinas

The Dashboard chart/graph will automatically re-size to fill the available space. The images above were the result of reducing the size to better fit in this document.

Date range: 2021-02-01 00:00 until 2021-05-13 23:59

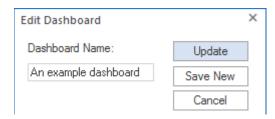
The Dashboard is built "on demand", when a Dashboard is selected from the left side menu and it has not yet been built since the last time the SofTrack Console was opened, it will be built. Building of the Dashboard is performed by querying the appropriate SQL Table(s).

To refresh the Dashboard, click the Refresh button at the top left.

0

Editing / Renaming a Dashboard

To edit the current Dashboard being viewed, select the Edit Dashboard button. When editing a Dashboard currently being viewed a new option appears providing the ability to save the edited Dashboard as a new Dashboard. This allows you to easily copy an existing Dashboard into a new Dashboard:



If the Update button is selected, the existing Dashboard is updated including renaming the Dashboard if its name is modified.

Once Updated or Save New is clicked the Dashboard is refreshed (rebuilt).

Note: If a scheduled email has previously been configured for the Dashboard that is being renamed, each scheduled email will be automatically updated to the new name.

Exporting a Dashboard

Dashboards can be exported to HTML. The exported Dashboard has all images encoded into a single HTML file. The exported HTML file can easily be shared.

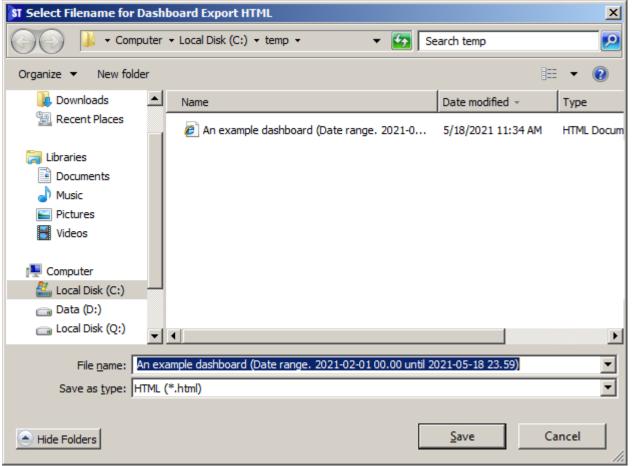
When viewing a Dashboard, click the Export Statistics button:



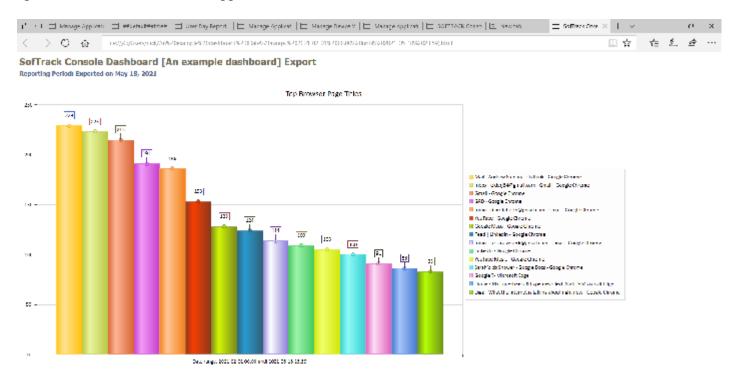
The Export button is generic as it refers to "Sortable HTML", but the export will only consists of a Title, date export and the images.

When clicked, the default filename shown is based on the name of the current Dashboard, and, if any graphs/charts within include a date range, the first charge graph/chart's date range will be included. Please note, when multiple (up to 4) graphs/charts are included, it is possible each will have its own date range. For purposes of creating the default filename for export, only the first date range will be used:

SofTrack Managed Assets Administrator Guide



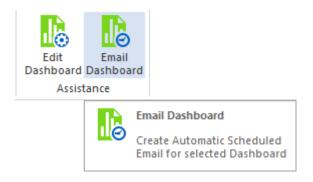
Once the filename is determined, click "Save". After saving the HTML file, it will automatically be opened in the default Browser application and shown:



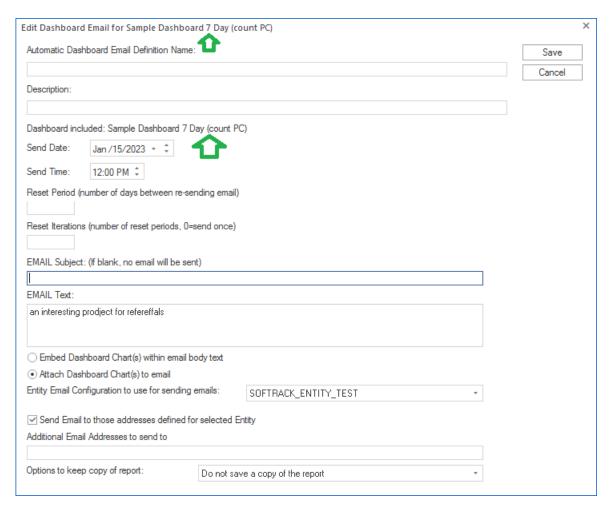
Scheduling Dashboard Emails

Dashboards can be scheduled for automatic creation and emailing. When scheduled, the Dashboard's configuration is utilized and a new query for current values is performed to create the emailed results.

To begin, when viewing the list of Dashboards or a specific Dashboard, click the Email Dashboard button:



And the following window will appear:



The green arrows show the name of the Dashboard being scheduled. The Dashboard name is used to retrieve the configuation when the scheduled email is being created. If the Dashboard is renamed, all existing scheduled email activities will be updated with the new name.

Each scheduled email includes one Dashboard. All charts configured (up to 4) for the selected Dashboard will be emailed.

There is no limit on the number of scheduled emails that can be created for a specific Dashboard.

If a scheduled email for a Dashboard is desired for each Monday at 7am, on the Send Date, select the next Monday and then in the Reset Period select 7 (number of days between reports being emailed) and set the Reset Iterations to 999 (7 days repeated 999 times is over 19 years of reports).

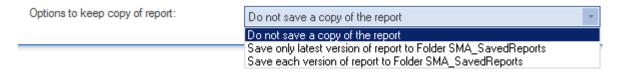
The scheduled email reset period and reset iterations can be modified after creation of the scheduled email.

There are 2 exclusive options, Embed or Attach Dashboard Charts. Both deliver the same Charts. The embed option embeds the images inside the email using an HTML document. The attach option attaches each Chart to the text-based email. The attach option provides easier access to each image if further processing will occur once the email is received.

Next, select the Entity to use for the email configuration to be used. The selected Entity can be any Entity, it does not need to be part of the actual report.

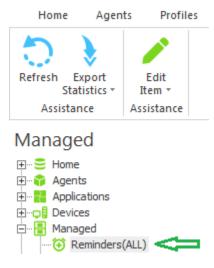
When including the list of Additional Email Addresses, separate each email address with a semicolon.

The final option allows the ability to save a copy of the report to the STLOG\SMA_SavedReports folder. The actual files saved are the image files.



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

Once the scheduled email configuration is saved, it will appear in the Managed section under the Reminders (ALL) item:



Use this section to edit or remove the scheduled Dashboard email configurations.

The scheduled Dashboard emails are prepared and directly sent by the SofTrack Server Agent.

Dashboard Samples and SQL Queries

This section shows a sample of each Dashboard and provides the SQL Query used to create. The SQL Queries are "per SofTrack Entity" configured. When multiple SofTrack Entities are included the Dashboard creation includes combining the results for each Entity to produce a single result. The "source" SofTrack Entity is not included in the Dashboard results.

If any legend item name exceeds 64 characters, only the first 64 characters are shown in the charts created.

For each Dashboard with EXE in the title, the following executable files are excluded from reporting:

Exact matches:

searchUI.exe systray.exe setup.exe rundll32.exe explorer.exe csrss.exe AcWebBrowser.exe

Partial matches:

ExperienceHost.exe FrameHost.exe

There are other exclusions for selected Dashboards, each will be detailed in its section.

Most used products | By EXE Launches (not version specific)

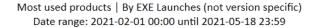
This Dashboard searches by selected Date Range.

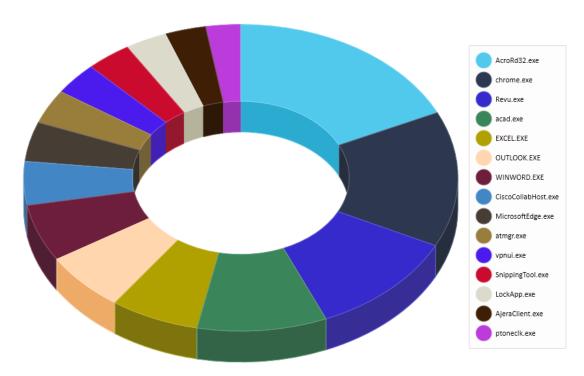
The SQL Query is based on the following:

SELECT COUNT (EXEName) AS numberFound, EXEName
FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE]
WHERE (ActiveSeconds > 5) AND (DATE_RANGE)
GROUP BY EXEName ORDER BY numberFound DESC:

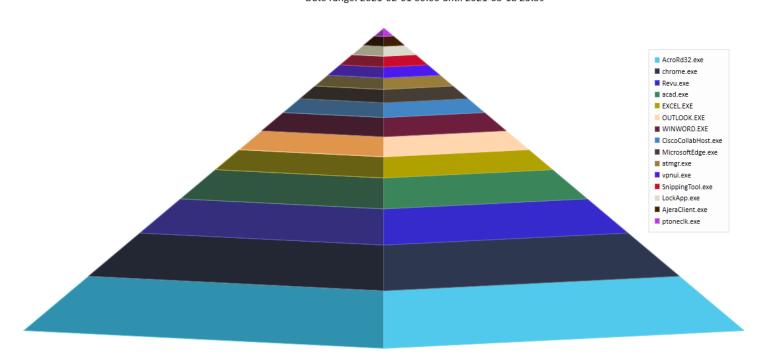
The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

ActiveSeconds exceeding "5 seconds" is used to ensure only applications that were engaged are included in the results.

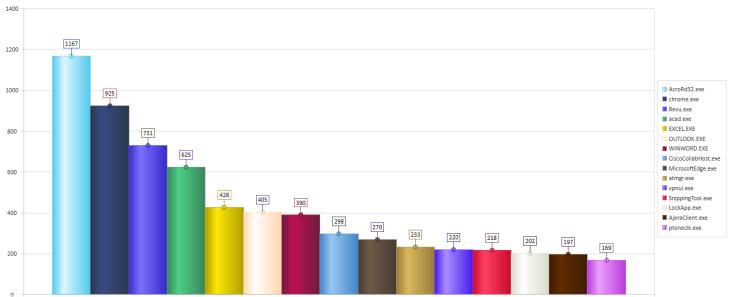




Most used products | By EXE Launches (not version specific)
Date range: 2021-02-01 00:00 until 2021-05-18 23:59



Most used products | By EXE Launches (not version specific)
Date range: 2021-02-01 00:00 until 2021-05-18 23:59



Most used products | By EXE Total Usage Time (not version specific)

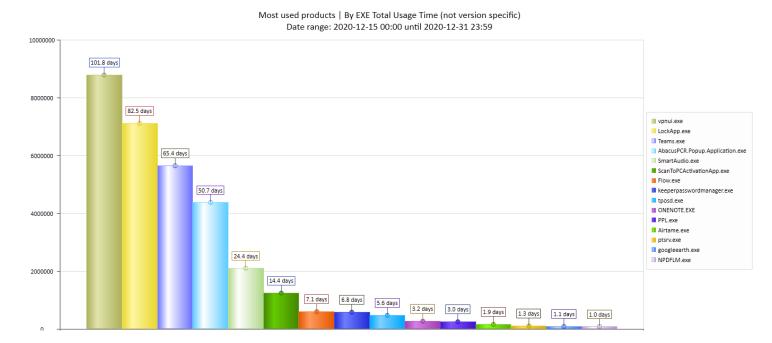
This Dashboard searches by selected Date Range. Total Usage Time includes all active + all idle time.

The SQL Query is based on the following:

SELECT EXEName, COUNT(*) AS mycount, SUM(CAST(TotalSeconds AS BIGINT)) AS mySUM FROM [SOFTRACK ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (DATE RANGE) GROUP BY EXEName ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



Most used products | By EXE Total Active Time (not version specific)

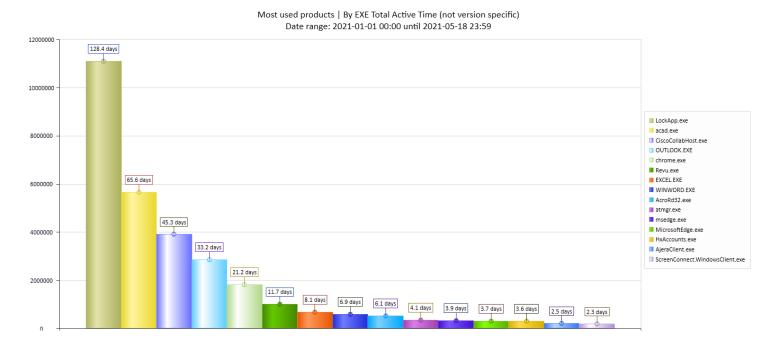
This Dashboard searches by selected Date Range. Active Time indicates the application was in-use and was currently focused on the desktop.

The SQL Query is based on the following:

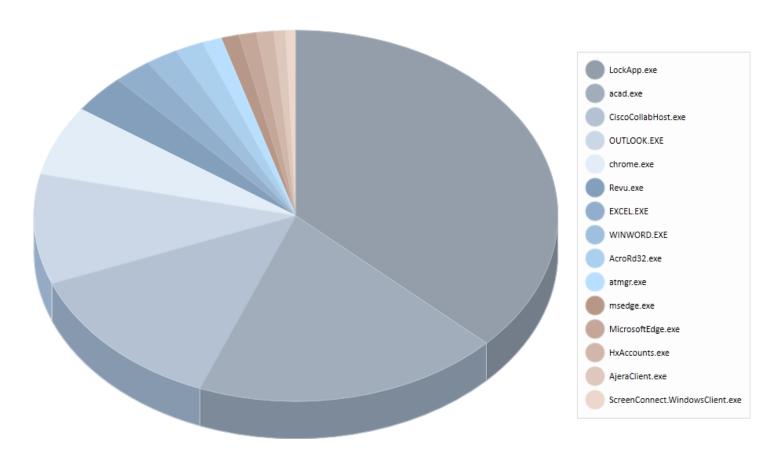
SELECT EXEName, COUNT(*) AS mycount, SUM(CAST(ActiveSeconds AS BIGINT)) AS mySUM FROM [SOFTRACK ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (DATE_RANGE)
GROUP BY EXEName ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the

date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.



Most used products | By EXE Total Active Time (not version specific)
Date range: 2021-01-01 00:00 until 2021-05-18 23:59



Most used products | By EXE Total Idle Time (not version specific)

This Dashboard searches by selected Date Range. Idle time indicates the application was an active process but was not the currently focused application on the desktop.

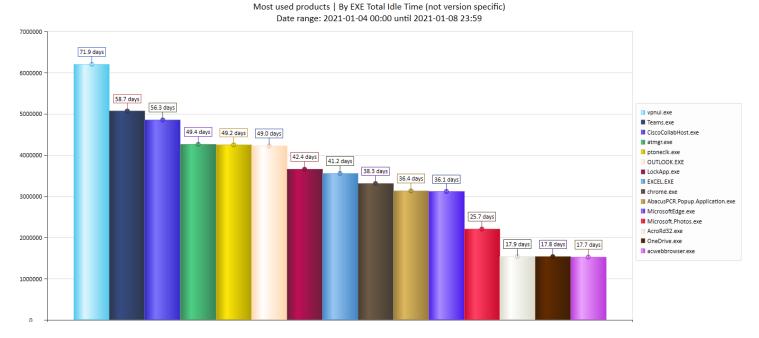
The SQL Query is based on the following:

SELECT EXEName, COUNT(*) AS mycount, SUM(CAST(IdleSeconds AS BIGINT)) AS mySUM FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (DATE_RANGE)
GROUP BY EXEName ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the

date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



Most used products + version | By EXE Launches

This Dashboard searches by selected Date Range.

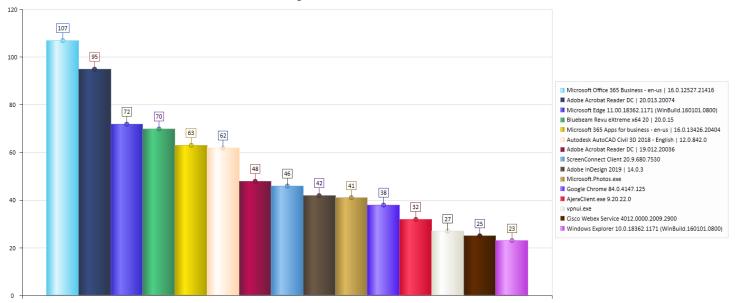
The SQL Query is based on the following:

SELECT COUNT (EXEVersion) AS numberFound, EXEAppName,EXEDescription,EXEVersion,EXEName FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (ActiveSeconds > 5) AND (DATE_RANGE) GROUP BY EXEAppName, EXEDescription, EXEVersion, EXEName ORDER BY numberFound DESC;

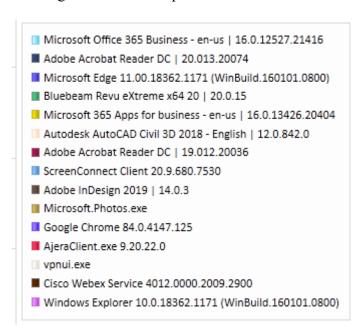
The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

ActiveSeconds exceeding "5 seconds" is used to ensure only applications that were engaged are included in the results.

Most used products + version | By EXE Launches Date range: 2021-01-04 00:00 until 2021-01-08 23:59



The Legend details each product + version:



Some applications such as vpnui.exe (part of Cisco AnyConnect) do not include details as they are not provided by the application.

Most used products + version | By EXE Total Usage Time

This Dashboard searches by selected Date Range. Total Usage Time includes all active + all idle time.

The SQL Query is based on the following:

SELECT EXEVersion, COUNT(*) AS mycount, EXEName, EXEAppName, EXEDescription,

SUM(CAST(TotalSeconds AS BIGINT)) AS mySUM

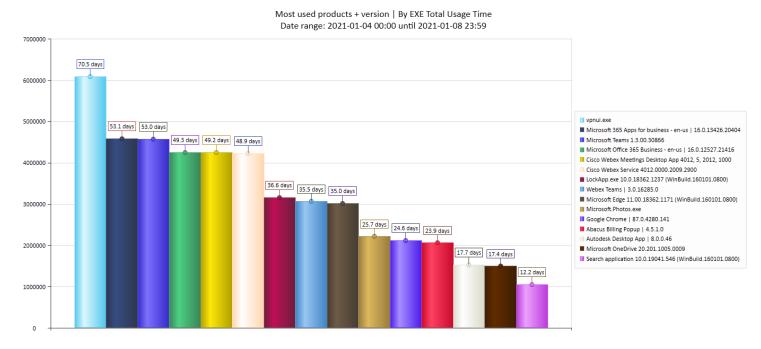
FROM [SOFTRACK ENTITY NAME].[dbo].[ALL SOFTWARE USAGE]

WHERE (DATE RANGE)

GROUP BY EXEName, EXEAppName, EXEDescription, EXEVersion ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



Most used products + version | By EXE Total Active Time

This Dashboard searches by selected Date Range. Total Active Time indicates the application was in-use and was the currently focused application on the user desktop.

The SQL Query is based on the following:

SELECT EXEVersion, COUNT(*) AS mycount, EXEName, EXEAppName, EXEDescription, SUM(CAST(ActiveSeconds AS BIGINT)) AS mySUM

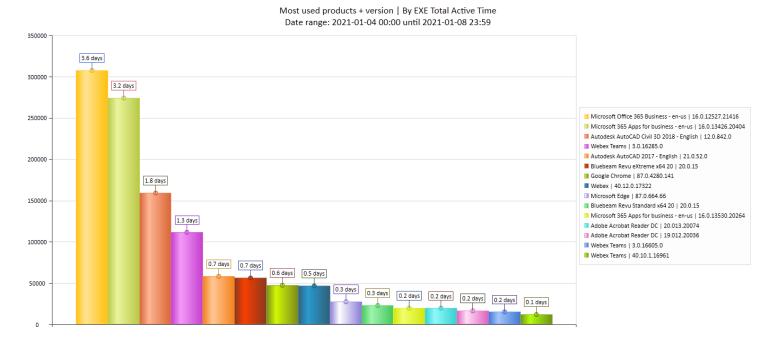
FROM [SOFTRACK ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE]

WHERE (DATE RANGE)

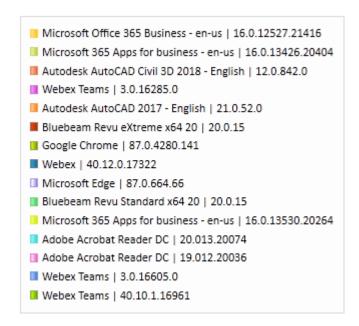
GROUP BY EXEName, EXEAppName, EXEDescription, EXEVersion ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



The Legend details each product + version:



Most used products + version | By EXE Total Idle Time

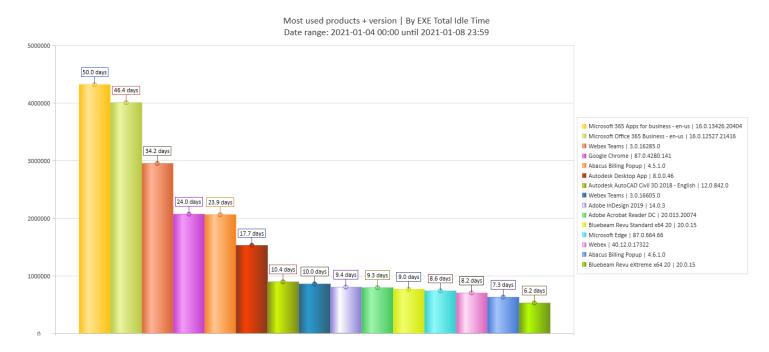
This Dashboard searches by selected Date Range. Idle time indicates the application was an active process but was not the currently focused application on the desktop.

The SQL Query is based on the following:

SELECT EXEVersion, COUNT(*) AS mycount, EXEName, EXEAppName, EXEDescription, SUM(CAST(IdleSeconds AS BIGINT)) AS mySUM
FROM [SOFTRACK_ENTITY_NAME]. [dbo]. [ALL_SOFTWARE_USAGE]
WHERE (DATE_RANGE) GROUP BY EXEName, EXEAppName, EXEDescription, EXEVersion ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



The Legend indicates each application included in the chart:

Microsoft 365 Apps for business - en-us | 16.0.13426.20404

Microsoft Office 365 Business - en-us | 16.0.12527.21416

Webex Teams | 3.0.16285.0

Google Chrome | 87.0.4280.141

Abacus Billing Popup | 4.5.1.0

Autodesk Desktop App | 8.0.0.46

Autodesk AutoCAD Civil 3D 2018 - English | 12.0.842.0

Webex Teams | 3.0.16605.0

Adobe InDesign 2019 | 14.0.3

Adobe Acrobat Reader DC | 20.013.20074

Bluebeam Revu Standard x64 20 | 20.0.15

Microsoft Edge | 87.0.664.66

Webex | 40.12.0.17322

Abacus Billing Popup | 4.6.1.0

Bluebeam Revu eXtreme x64 20 | 20.0.15

Most installed products by workstation count (not version specific)

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (ApplicationName) AS numberFound, ApplicationName FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY_APP] WHERE (DATALENGTH(Publisher) > 2) GROUP BY ApplicationName ORDER BY numberFound DESC;

This report automatically excludes application names:

Exact matches:

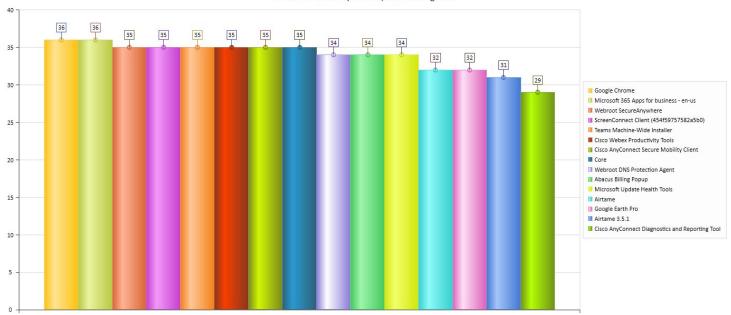
WIC
DXM_RUNTIME
MobileOptionPack
SchedulingAgent
DirectDrawEx
MPlayer2

Partial matches:

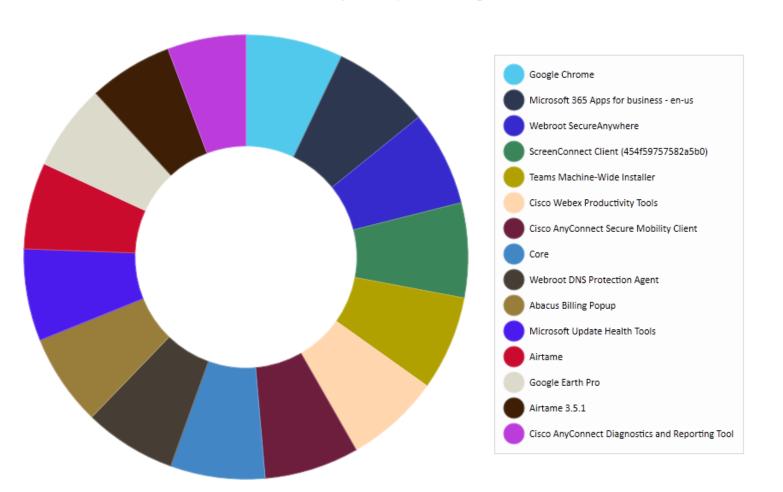
redistributable
Click-to-Run
Localization
ClientAgent
runtime
microsoft visual basic
softrack local
softrack-slam

SofTrack Managed Assets Administrator Guide

Most installed products by workstation count (not version specific)
All current inventory records, no date range used



Most installed products by workstation count (not version specific)
All current inventory records, no date range used



In the example above "Airtame" and "Airtame 3.5.1" are both shown. This report is "versionless". However, in this specific case, the "Airtame" application name includes its version. Most products separately store the version from the application name. Therefore it is possible for those products that include the version in the application name to show multiple times in the results.

Most used products by workstation count (not version specific)

This Dashboard searches by selected Date Range. Idle time indicates the application was an active process but was not the currently focused application on the desktop.

The SQL Query is based on the following:

SELECT COUNT(*) as NumberFound, EXEDescription FROM (SELECT DISTINCT EXEDescription, ComputerName FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (ActiveSeconds > 5) AND DATE_RANGE)a GROUP BY EXEDescription ORDER BY NumberFound DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

This report automaticallys excludes the following application names:

Exact matches:

Windows Explorer LenovoVantageUWP Settings Print Dialog Task Manager Lavout ptUpdate SSMS ClickOnce AecCB Windows Command Processor Update Client PointFileConverter Pick an app Search application Windows® installer Pick an application

Partial matches:

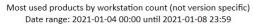
Windows Shell Popup.Application Experience Host PluginHost Application Frame Rundll32 Frame Host File Picker COM Surrogate UI Host Chromium host security update host executable Preview Handler Background Task Surrogate Host Task Host MusNotifyIcon

BrowserSubprocess
SmartAudio
Java(TM) Platform
Setup/Uninstall
Credential Manager
This utility controls

SofTrack Managed Assets Administrator Guide Node.js:

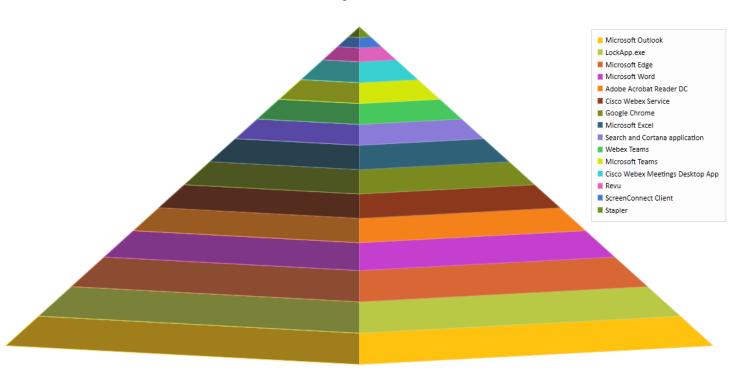
Redistributable LGHUB Download Manager LFPDriverUI

Sample results:





Most used products by workstation count (not version specific)
Date range: 2021-01-04 00:00 until 2021-01-08 23:59



Most installed products + version by workstation count

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (ApplicationName) AS numberFound, ApplicationName, Version, Publisher FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY_APP] WHERE (DATALENGTH(Publisher) > 2) GROUP BY ApplicationName, Version, Publisher ORDER BY numberFound DESC;

This report automatically excludes application names:

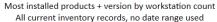
Exact matches:

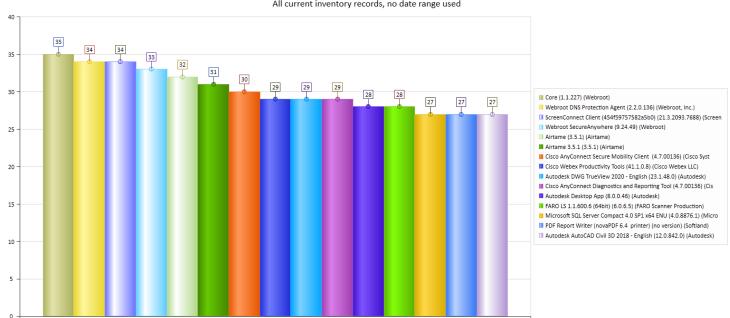
WIC
DXM_RUNTIME
MobileOptionPack
SchedulingAgent
DirectDrawEx
MPlayer2

Partial matches:

redistributable
Click-to-Run
Localization
ClientAgent

runtime
microsoft visual basic
softrack local
softrack-slam

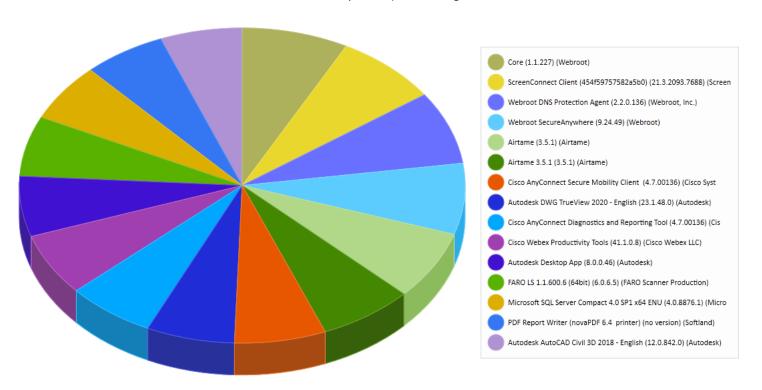




below is the legend of the above bar chart:



Most installed products + version by workstation count All current inventory records, no date range used



Note: Airtame is shown twice due to how it is internally configured.

Most used products + version by workstation count

This Dashboard searches by selected Date Range. Idle time indicates the application was an active process but was not the currently focused application on the desktop.

The SQL Query is based on the following:

SELECT COUNT(*) as NumberFound, EXEDescription, EXEVersion FROM (SELECT DISTINCT EXEDescription, ComputerName, EXEVersion FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (ActiveSeconds > 5) AND DATE_RANGE)a GROUP BY EXEDescription, EXEVersion ORDER BY NumberFound DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

This report automaticallys excludes the following application names:

Exact matches:

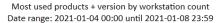
Windows Explorer LenovoVantageUWP Settings Print Dialog Task Manager Lavout ptUpdate SSMS ClickOnce **AecCB** Windows Command Processor Update Client Pick an app PointFileConverter Windows® installer Search application Pick an application

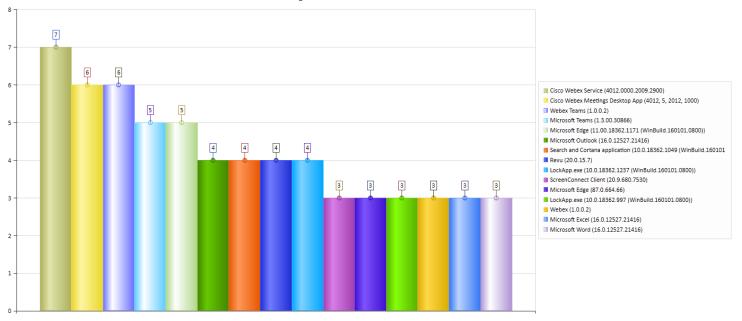
Partial matches:

Windows Shell security update Experience Host Preview Handler Application Frame Surrogate Host Frame Host MusNotifyIcon COM Surrogate BrowserSubprocess Chromium host SmartAudio host executable Java(TM) Platform Background Task Setup/Uninstall Task Host Credential Manager This utility controls Popup.Application PluginHost Node.is: Rundll32 Redistributable File Picker LGHUB UI Host Download Manager

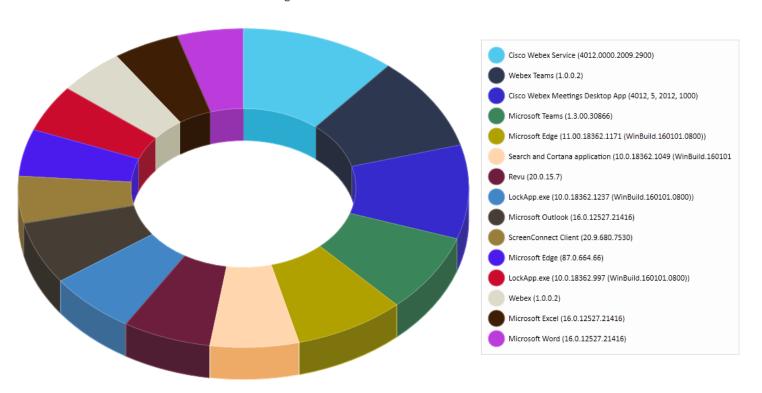
LFPDriverUI

Sample results:





Most used products + version by workstation count Date range: 2021-01-04 00:00 until 2021-01-08 23:59



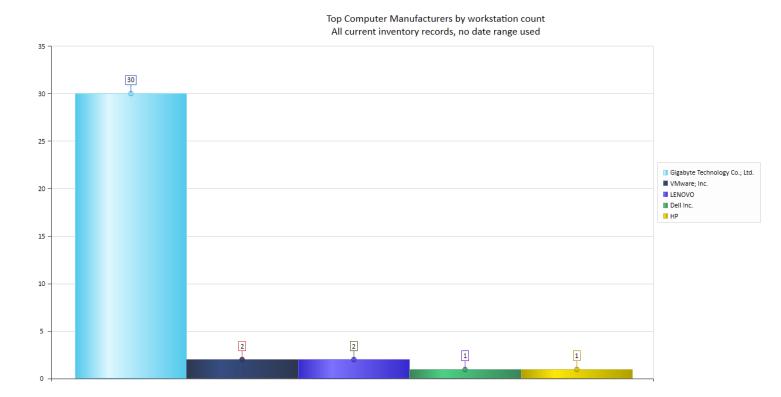
Top Computer Manufacturers by workstation count

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (Make) AS numberFound, Make FROM [SOFTRACK_ENTITY_NAME.[dbo].[INVENTORY] GROUP BY Make ORDER BY numberFound DESC;

Sample result:



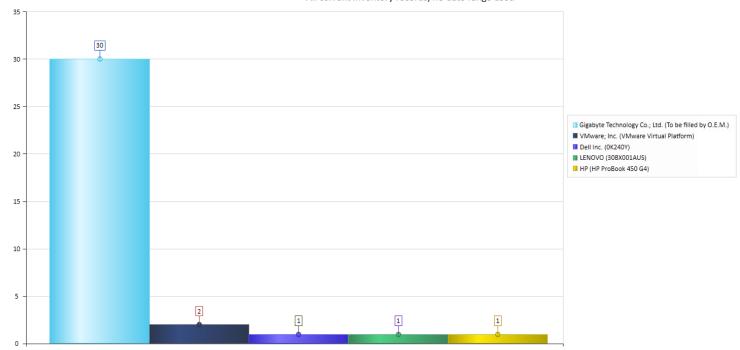
Top Computer Manufacturers + Model by workstation count

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (Make) AS numberFound, Make, Model FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY] GROUP BY Make, Model ORDER BY numberFound DESC;

Top Computer Manufacturers + Model by workstation count All current inventory records, no date range used



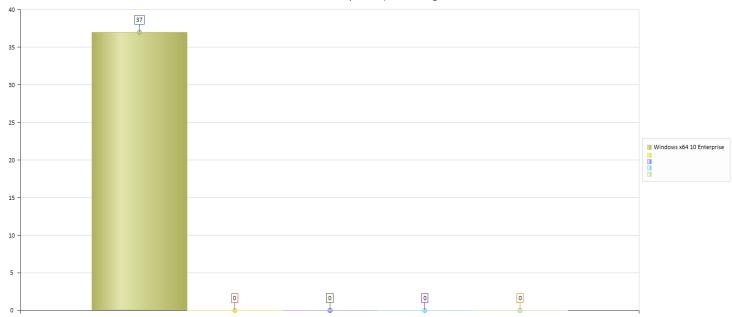
Top Windows OS Versions (base version) by workstation count

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (WindowsType) AS numberFound, WindowsType FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY] GROUP BY WindowsType ORDER BY numberFound DESC;

Top Windows OS Versions (base version) by workstation count All current inventory records, no date range used



The above result shows a single base version of Windows® is in-use. The chart is set to the top 5 results, however, only a single result occurred – the vacant slots each show 0.

Top Windows 10 versions + release + build by workstation count

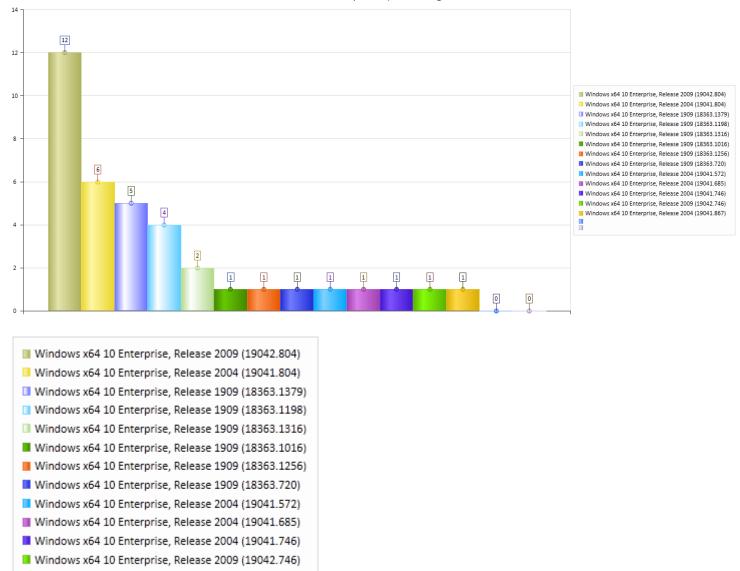
This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (WindowsType) AS numberFound, WindowsType, WindowsRelease, WindowsBuild FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY] WHERE WindowsType LIKE '%Windows%10%'

GROUP BY WindowsType, WindowsRelease, WindowsBuild ORDER BY numberFound DESC;

Top Windows 10 versions + release + build by workstation count All current inventory records, no date range used



The above result includes 13 total results, 2 empty slots.

Windows x64 10 Enterprise, Release 2004 (19041.867)

Free Space C: Drive by workstation count

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (TotalFreeCdrive) AS numberFound, TotalFreeCdrive FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY] GROUP BY TotalFreeCdrive ORDER BY numberFound DESC;

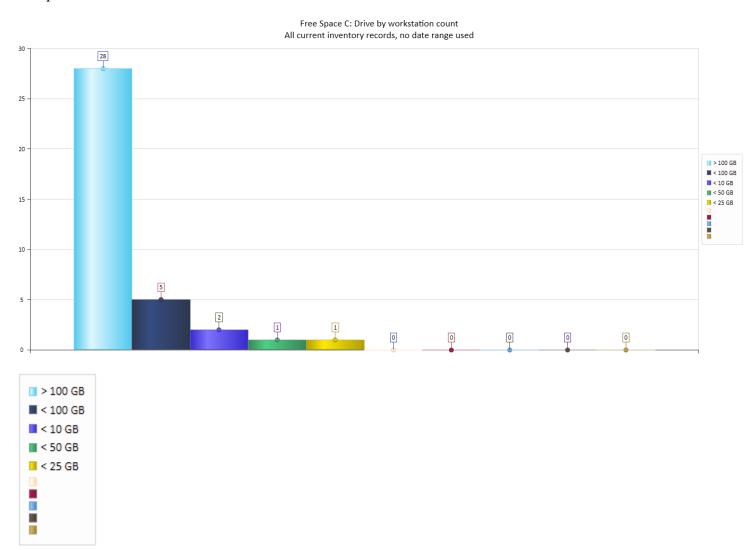
This Dashboard has 6 possible categories:

< 1 GB (less than 1GB free space)

- < 10 GB
- < 25 GB
- < 50 GB
- < 100 GB
- > 100 GB (more than 100GB free space)

Note: Not all possible categories may occur. Each category will only appear if there is at least one workstation that fits its criteria.

Sample result:



The above is the legend of the chart shown above.

RAM installed by workstation count

This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

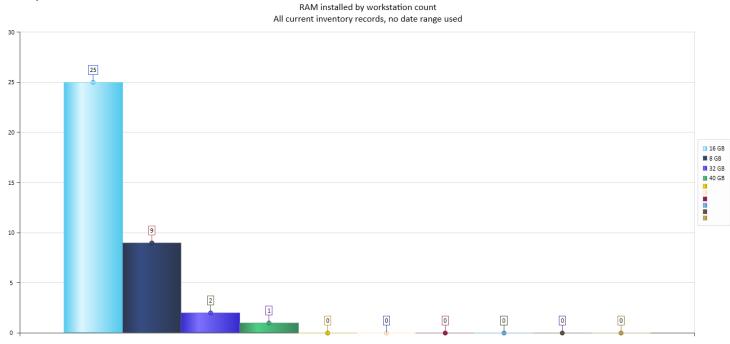
SELECT COUNT (PhysicalRAM) AS numberFound, PhysicalRAM FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY] GROUP BY PhysicalRAM ORDER BY numberFound DESC;

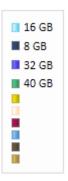
This Dashboard has 11 possible categories:

< 4 GB 4 GB 8 GB 16 GB 20 GB 24 GB 28 GB 32 GB 36 GB 40 GB >40 GB

Note: Not all possible categories may occur. Each category will only appear if there is at least one workstation that fits its criteria.

Further, if any workstation's RAM is not evenly divisble by 4 (for instance, 7GB) it is rounded up.





The above is the legend of the chart shown above.

CPU types installed (make + model) by workstation count

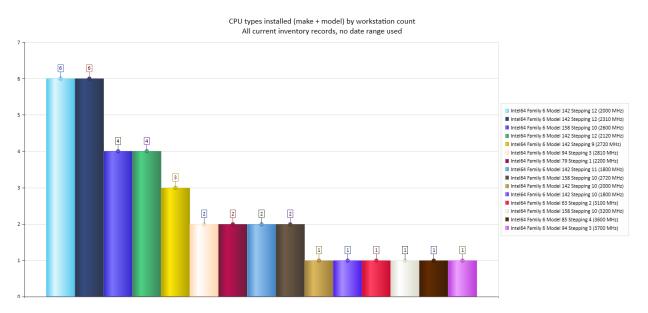
This Dashboard searches all inventory records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (CPUType) AS numberFound, CPUType, CPUSpeed FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY_CPU] WHERE (CPUNumber=0) GROUP BY CPUType, CPUSpeed ORDER BY numberFound DESC;

The query includes the condition "CPUNumber=0" because every CPU has at least one "core"

The results include a definition of the CPU as provided by the CPU Vendor and its speed rating, but not the "common name" of the CPU as that can vary, even for the same definition the actual CPU speed rating and common product name can be different. Therefore, only the vendor definition is provided.



Intel64 Family 6 Model 142 Stepping 12 (2000 MHz)

Intel64 Family 6 Model 142 Stepping 12 (2310 MHz)

Intel64 Family 6 Model 158 Stepping 10 (2600 MHz)

Intel64 Family 6 Model 142 Stepping 12 (2120 MHz)

Intel64 Family 6 Model 142 Stepping 9 (2720 MHz)

Intel64 Family 6 Model 94 Stepping 3 (2810 MHz)

Intel64 Family 6 Model 79 Stepping 1 (2200 MHz)

Intel64 Family 6 Model 142 Stepping 11 (1800 MHz)

Intel64 Family 6 Model 158 Stepping 10 (2720 MHz)

Intel64 Family 6 Model 142 Stepping 10 (2000 MHz)

Intel64 Family 6 Model 142 Stepping 10 (1800 MHz)

Intel64 Family 6 Model 63 Stepping 2 (3100 MHz)

Intel64 Family 6 Model 158 Stepping 10 (3200 MHz)

Intel64 Family 6 Model 85 Stepping 10 (3200 MHz)

Intel64 Family 6 Model 85 Stepping 3 (3700 MHz)

Above is the legend of the image above.

User Logon Domains found

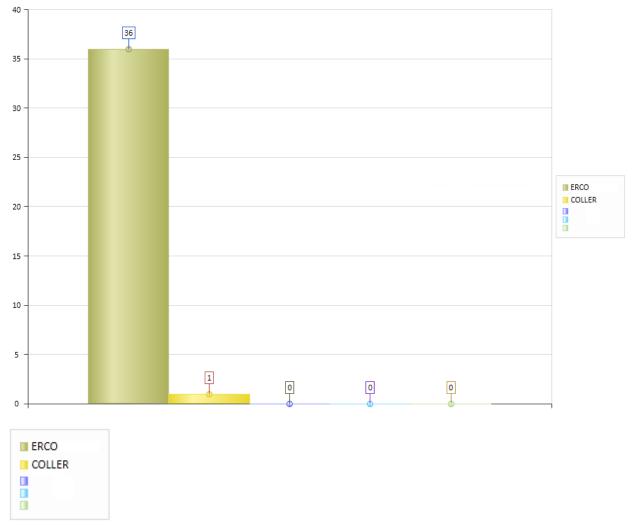
This Dashboard searches all logon records and does not use the Date Range.

The SQL Query is based on the following:

SELECT COUNT (PrimaryUserWindows) AS numberFound, PrimaryUserWindows FROM [SOFTRACK_ENTITY_NAME].[dbo].[INVENTORY] GROUP BY PrimaryUserWindows ORDER BY numberFound DESC;

The query results include the domain\user name. The chart results include only the Domain name.





Above is the legend of the image above.

Top Users by Active Application Time (all applications)

This Dashboard searches by selected Date Range. Total Active Time includes only the time the application was the current focus on the user desktop.

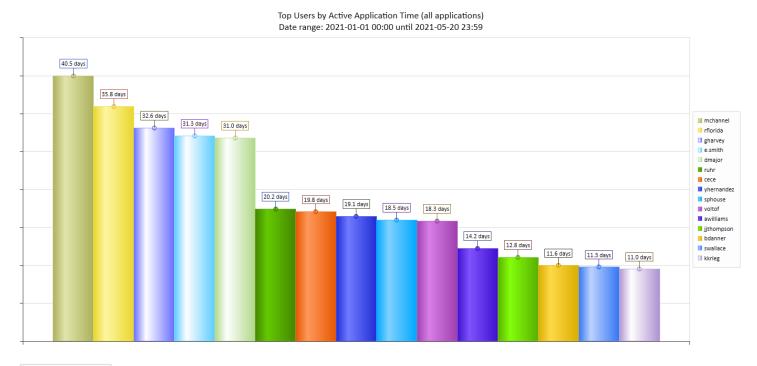
The SQL Query is based on the following:

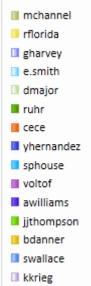
SELECT Username, COUNT(*) AS mycount, SUM(CAST(ActiveSeconds AS BIGINT)) AS mySUM FROM [SOFTRACK ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (DATE RANGE) GROUP BY Username ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started

prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:





Above is the legend for image above.

Top Users by Idle Application Time (all applications)

This Dashboard searches by selected Date Range. Total Idle Time includes only the time the application was active and not the current focus on the user desktop.

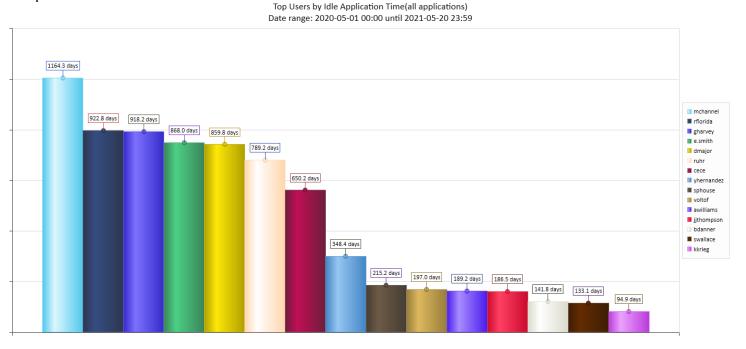
Because a user can have multiple applications simultaneously in-use and only one can be Active at a time, it is possible for a specific user to have more accumulated idle time than there are days in the reporting period. This is due to each idle application simultaneously accumulating idle time. For instance, if the user has 4 applications in-use and one is active for a period of 1 hour, the other 3 applications accumulate 3 hours (1 hour * 3 idle applications) of idle time. The more applications a user has open and idle the more idle time that will accumulate.

The SQL Query is based on the following:

SELECT Username, COUNT(*) AS mycount, SUM(CAST(IdleSeconds AS BIGINT)) AS mySUM FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_SOFTWARE_USAGE] WHERE (DATE RANGE) GROUP BY Username ORDER BY mySUM DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



Top Browser Page Titles

This Dashboard searches by selected Date Range. For this report, the browser page titles are limited to the first 64 characters. The SQL Query indicates the browser EXE names included in the report.

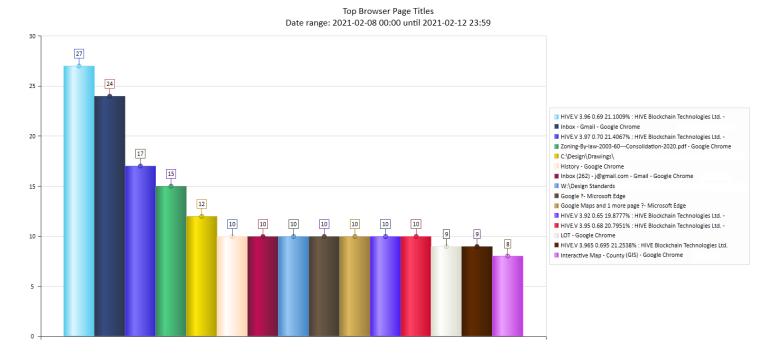
The SQL Query is based on the following:

SELECT COUNT (PageTitle) AS numberFound, PageTitle, EXEName

FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_PAGE_TITLE_ACTIVITY]
WHERE (DATE_RANGE) AND ((EXEName LIKE 'chrome.exe') OR (EXEName LIKE 'MSEDGE.EXE') OR
(EXEName LIKE 'MicrosoftEdge.exe') OR (EXEName LIKE 'FIREFOX.EXE') OR (EXEName LIKE
'MOZILLA.EXE')) GROUP BY PageTitle, EXEName ORDER BY numberFound DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:





Above is the legend of the image above.

Top Page Titles, non-browser applications

This Dashboard searches by selected Date Range. For this report, the non-browser page titles are limited to the first 64 characters.

The SQL Query is based on the following:

SELECT COUNT (PageTitle) AS numberFound, PageTitle, EXEName
FROM [SOFTRACK ENTITY_NAME].[dbo].[ALL_PAGE_TITLE_ACTIVITY]
WHERE (DATE_RANGE) AND ((EXEName NOT LIKE 'explorer.exe') OR (EXEName NOT LIKE 'chrome.exe') OR (EXEName NOT LIKE 'MSEDGE.EXE') OR (EXEName NOT LIKE 'MicrosoftEdge.exe') OR (EXEName NOT LIKE 'FIREFOX.EXE') OR (EXEName NOT LIKE 'MOZILLA.EXE')) GROUP BY PageTitle, EXEName ORDER BY numberFound DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

This report specifically excludes the following executables:

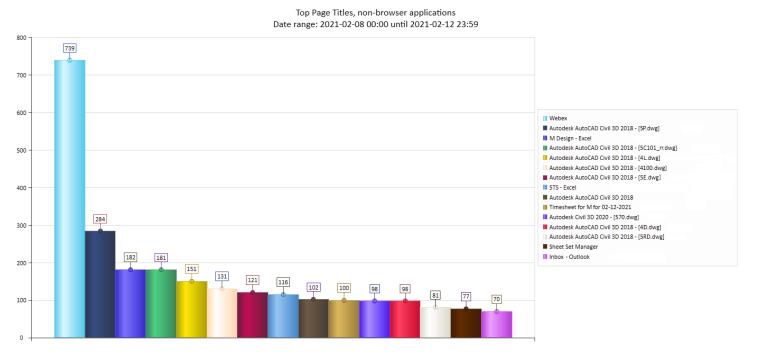
Exact match:

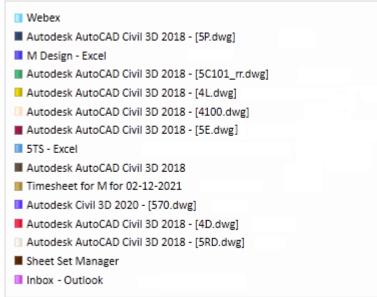
AcWebBrowser.exe systray.exe csrss.exe SearchUI.exe

Partial match:

ExperienceHost.exe
FrameHost.exe

Sample results:





Above is the Legend of the image above.

Top screen saver users

This Dashboard searches by selected Date Range. For this report, screen saver usage is specific as shown in the SQL Query:

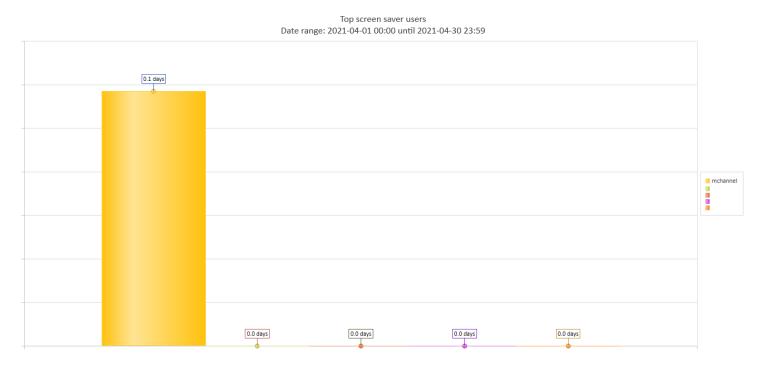
The SQL Query is based on the following:

SELECT COUNT (PageTitle) AS numberFound, Username, PageTitle, EXEName, SUM(CAST(ActiveSeconds AS BIGINT)) AS mySUM

FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_PAGE_TITLE_ACTIVITY]
WHERE (DATE_RANGE) AND (PageTitle LIKE '(screen saver)') GROUP BY Username, PageTitle,
EXEName ORDER BY numberFound DESC;

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



Active Users with least amount of logon time

This Dashboard searches by selected Date Range. For this report, the report is from least to greatest in the Top 5, Top 10 or Top 15 ranges. The report only includes those users that had at least one logon session in the selected date range. Users with no logon sessions are not included.

The SQL Query is based on the following:

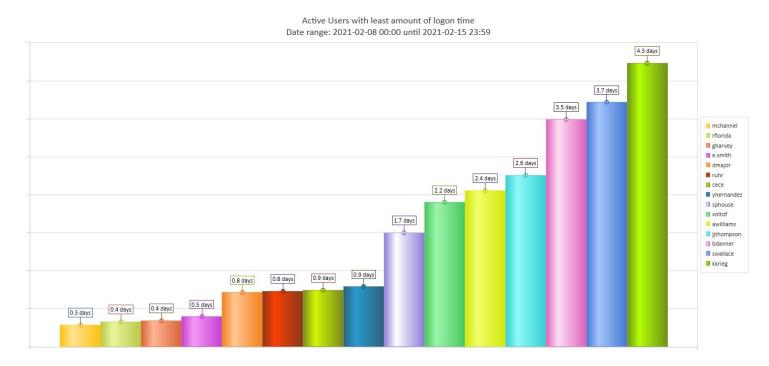
SELECT COUNT (Username) AS numberFound, Username, SUM(CAST(TotalLoginSeconds AS BIGINT)) AS mySUM

FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_LOGON_ACTIVITY]
WHERE (RecordType=193) AND (DATE_RANGE) GROUP BY Username ORDER BY mySUM ASC;

RecordType 193 is a logoff record, this indicates the record includes both logon and logoff time.

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:



Active Workstations with least amount of logon time (any user)

This Dashboard searches by selected Date Range. For this report, the report is from least to greatest in the Top 5, Top 10 or Top 15 ranges. The report only includes those workstations that had at least one logon session in the selected date range. Workstations with no logon sessions are not included.

Note: If a workstation has a single user, this report will likely be identical to the previous report showing Users with least amount of logon time. This report is most useful when workstations are shared between multiple users to assist in determining workstation utilization.

The SQL Query is based on the following:

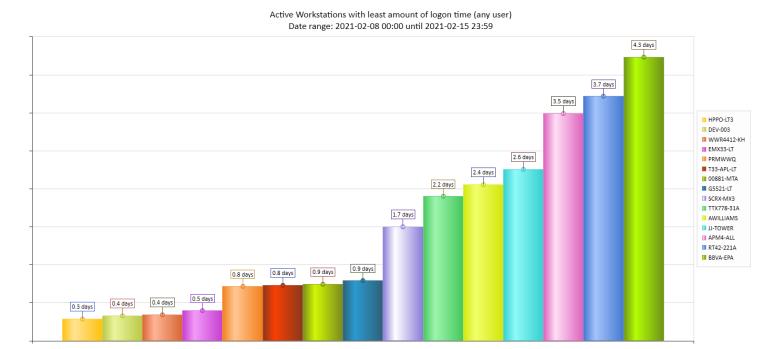
SELECT COUNT (ComputerName) AS numberFound, ComputerName, SUM(CAST(TotalLoginSeconds AS BIGINT)) AS mySUM

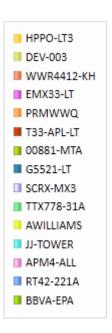
FROM [SOFTRACK_ENTITY_NAME].[dbo].[ALL_LOGON_ACTIVITY] WHERE (RecordType=193) AND (DATE_RANGE) GROUP BY ComputerName ORDER BY mySUM ASC;

RecordType 193 is a logoff record, this indicates the record includes both logon and logoff time.

The DATE_RANGE is not shown in this example; the placeholder (DATE_RANGE) is shown where it will be included in the query. The date range specifically includes all uses where the usage was occurring during any part of the date range. For instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 8 – February 15; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range of March 1 – March 31 it will include that usage that started February 1 and ended March 1.

Sample results:





Above is the Legend of the image above.

Daily Chart Software Category maximum concurrent usage

This Dashboard searches by selected Date Range. For this report, it will *only use* the Bar Chart format regardless of selection.

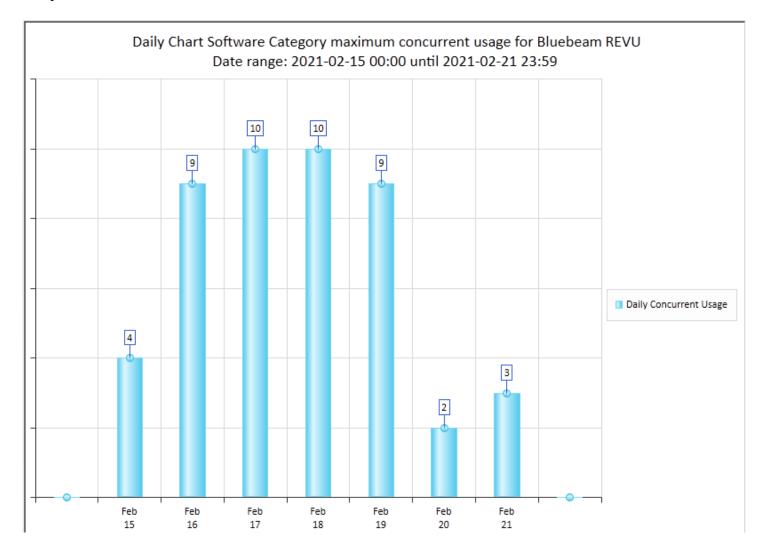
The SQL Query is constructed by first obtaining each application in the selected Software Category and using each to build the query value. In this sample, highlighted in blue, the Software Category is for the Bluebeam Revu application.

SELECT * from [SOFTRACK_ENTITY_TEST].[dbo].[ALL_SOFTWARE_USAGE] WHERE
RecordType=48 AND (EXEAppName LIKE '%Bluebeam Revu CAD x64 20%' OR EXEAppName LIKE
'%Bluebeam Revu CAD x64 2018.6%' OR EXEAppName LIKE '%Bluebeam Revu CAD x64 2019%' OR
EXEAppName LIKE '%Bluebeam Revu eXtreme x64 20%' OR EXEAppName LIKE '%Bluebeam Revu
eXtreme x64 20.1%' OR EXEAppName LIKE '%Bluebeam Revu eXtreme x64 2019.1%' OR
EXEAppName LIKE '%Bluebeam Revu Standard x64 20%' OR EXEAppName LIKE '%Bluebeam Revu
Standard x64 20.1%' OR EXEAppName LIKE '%Bluebeam Revu x64 20%' OR EXEAppName LIKE
'%Bluebeam Revu x64 2017.0.40%' OR EXEAppName LIKE '%Bluebeam Revu x64 2019.1%') AND
((EXEStartTimeUTC >= '2021-02-15 00:00' AND EXEStartTimeUTC <= '2021-02-21 23:59') OR
(EXEExitTimeUTC >= '2021-02-15 00:00' AND EXEExitTimeUTC <= '2021-02-21 23:59') OR
(EXEStartTimeUTC < '2021-02-15 00:00' AND EXEExitTimeUTC > '2021-02-15 00:00'))

The Date Range is shown in the yellow highlighted section of the above example. The date range specifically includes all uses where the usage was occurring during any part of the date range. For this instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 15 – February 21; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range

The query results are then processed to determine the maximum concurrent usage per day.

Sample result:



Daily Chart Software Category number of workstations where used

This Dashboard searches by selected Date Range. For this report, it will *only use* the Bar Chart format regardless of selection.

The SQL Query is constructed by first obtaining each application in the selected Software Category and using each to build the query value. In this sample, highlighted in blue, the Software Category is for the Bluebeam Revu application.

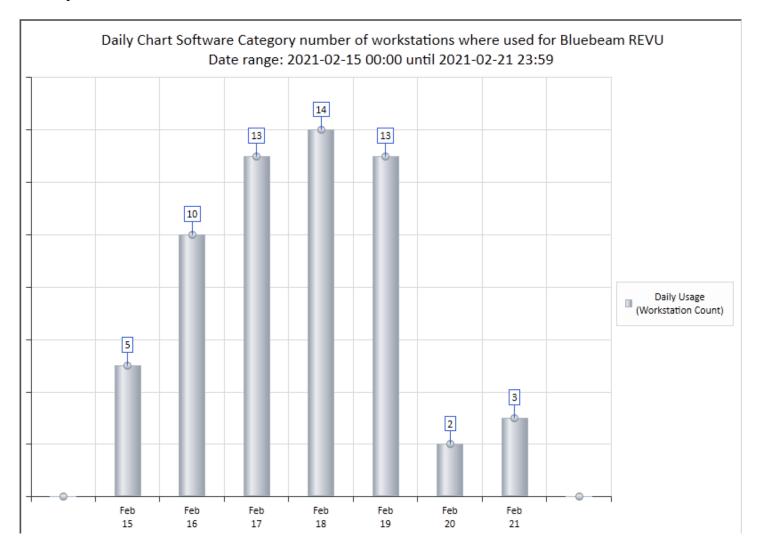
SELECT * from [SOFTRACK_ENTITY_TEST].[dbo].[ALL_SOFTWARE_USAGE] WHERE
RecordType=48 AND (EXEAppName LIKE '%Bluebeam Revu CAD x64 20%' OR EXEAppName LIKE
'%Bluebeam Revu CAD x64 2018.6%' OR EXEAppName LIKE '%Bluebeam Revu CAD x64 2019%' OR
EXEAppName LIKE '%Bluebeam Revu eXtreme x64 20%' OR EXEAppName LIKE '%Bluebeam Revu
eXtreme x64 20.1%' OR EXEAppName LIKE '%Bluebeam Revu eXtreme x64 2019.1%' OR
EXEAppName LIKE '%Bluebeam Revu Standard x64 20%' OR EXEAppName LIKE '%Bluebeam Revu
Standard x64 20.1%' OR EXEAppName LIKE '%Bluebeam Revu x64 20%' OR EXEAppName LIKE
'%Bluebeam Revu x64 2017.0.40%' OR EXEAppName LIKE '%Bluebeam Revu x64 2019.1%') AND
((EXEStartTimeUTC >= '2021-02-15 00:00' AND EXEStartTimeUTC <= '2021-02-21 23:59') OR

(EXEExitTimeUTC >= '2021-02-15 00:00' AND EXEExitTimeUTC <= '2021-02-21 23:59') OR (EXEStartTimeUTC < '2021-02-15 00:00' AND EXEExitTimeUTC > '2021-02-15 00:00'))

The Date Range is shown in the yellow highlighted section of the above example. The date range specifically includes all uses where the usage was occurring during any part of the date range. For this instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 15 – February 21; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range

The query results are then processed to determine the actual number of workstations where any application defined by the Software Category was used at any time for each day graphed. This is not a concurrent usage, this is an anytime usage to help determine the number of workstations where there is usage.

Sample result:

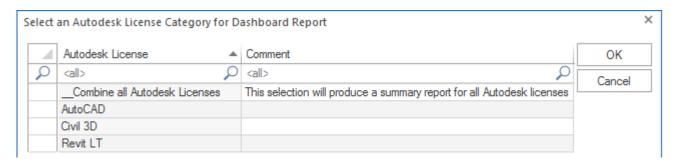


Autodesk® Named-User Summary Charts [Selected License]

This Dashboard creates 4 charts. This Dashboard searches by selected Date Range. For this report, the Chart Type and Chart Range fields are disabled. Click on the Chart Category to select the Autodesk® license to chart:

Configure Dashboard 1: Autodesk Named-User Summary Charts [Selected License] Chart Type: Chart Palette: Chart Range: Chart Category: Bar Chart Palette 1 Top 5 Configure Dashboard 2: Select Software Category NONE Click this button to select Software Category Chart Type: Chart Palette: Chart Range:

After clicking the Chart Category a new window will appear:



The first selection "__Combine all Autodesk Licenses" will build report Charts based on usage of all Autodesk® applications and will build the following charts:

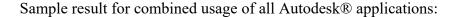
- Number of Unique Users (per day, week, month)
- Days of Usage per License Pool Expiration Date
- Count of Unique Users per Entity
- Application Versions (i.e. Revit 2020, Revit 2022, etc.) and number of usages that exceed 5 minutes in total time opened (this is to correlate with how Autodesk® charges for Named-User usage

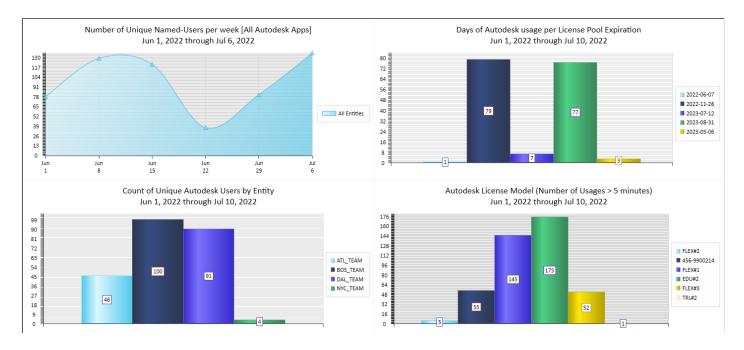
The remaining selections are for specific Autodesk® applications. When a specific Autodesk® application is charged, the following charts are built:

- Number of Unique Users (per day, week, month)
- Days of Usage
- Count of Unique Users per Entity
- License Model Usage with number of usages that exceed 5 minutes in total time opened (this is to correlate with how Autodesk® charges for Named-User usage)

This Chart is built using a "SQL Stored Procedure" named ADESK_R30 (or ADESK_R30S for when a specific Autodesk® application is selected rather than *Combine All*). This stored procedure is created by the SofTrack Console when creating or updating the SOFTRACK_ENTITY Database.

The Charts will automatically be created "per day" if the number of days charted is less than 32, will use "per week" if the number of days is less than 90 and otherwise, will chart activity "per month".

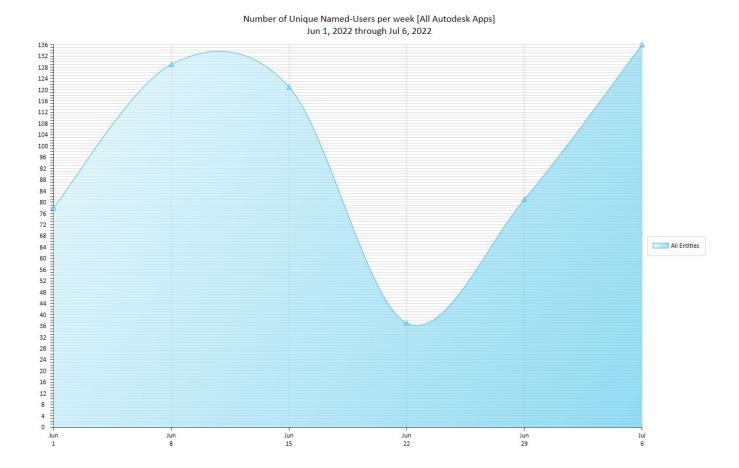




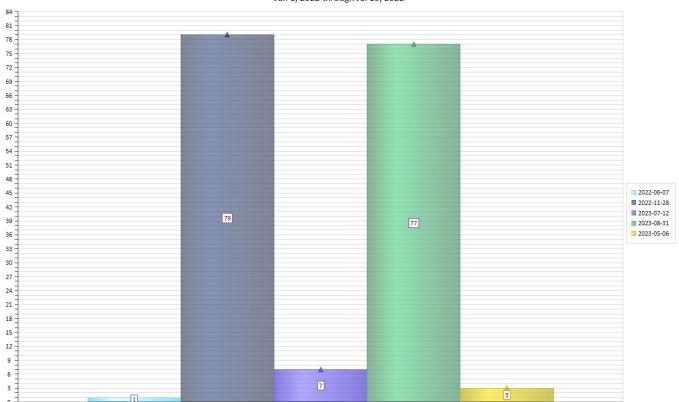
About Autodesk® Cloud Licenses

In the above image, the "License Pool" chart at top right includes captions that are dates, 2022-06-07, 2022-11-28, etc. These "License Pool" names are directly provided by Autodesk® and indicate the expiration date of the selected "License Pool". Upon expiration, any unconsumed licenses will no longer be available for use. Please contact Autodesk® for details regarding the number of unconsumed licenses.

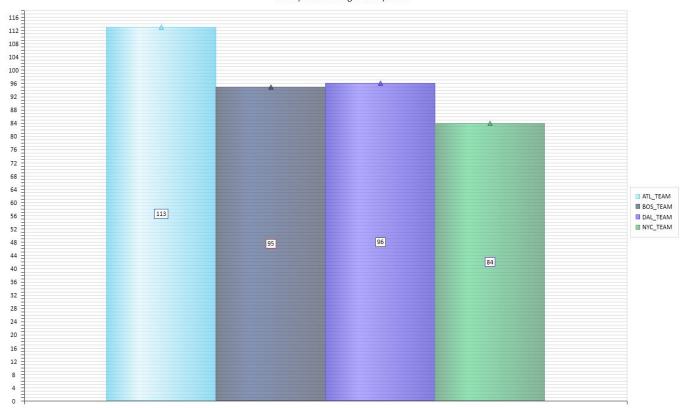
In the above image, the "License Model" chart at bottom right includes captions such as "FLEX#2", "456-9900214", "EDU#2", "TRL#2". These indicated the specific license type utilized. There is another value not shown, it has a prefix "RTL". "FLEX" indicates Flex licenses (licenses that are typically pre-purchased and consumed per-day at a rate based upon the exact Autodesk® product utilized. "456-9900214" indicates an Autodesk® Network (Multi-User) License. The actual value will indicate the Autodesk® serial number utilized. "EDU" indicates an educational license. "TRL" indicates an Autodesk® Free Trial license. "RTL" indicates an Autodesk® Single-User Subscription license.

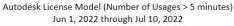


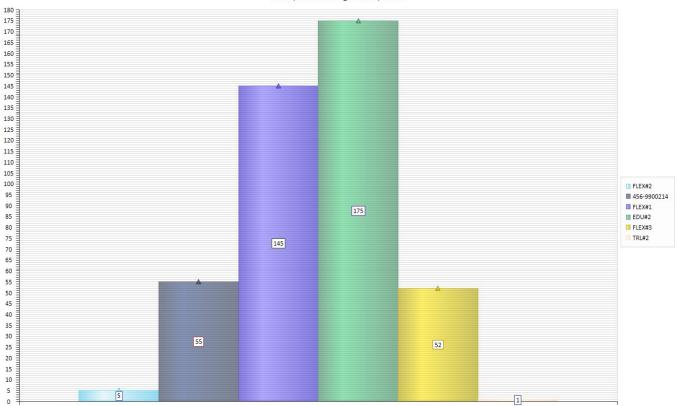
Days of Autodesk usage per License Pool Expiration Jun 1, 2022 through Jul 10, 2022



Count of Unique Autodesk Users by Entity Jun 1, 2022 through Jul 10, 2022

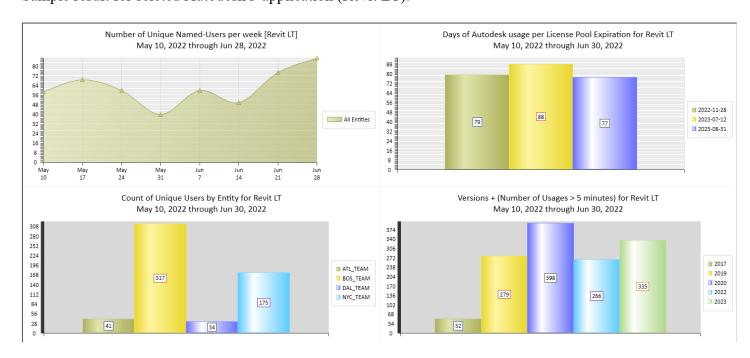


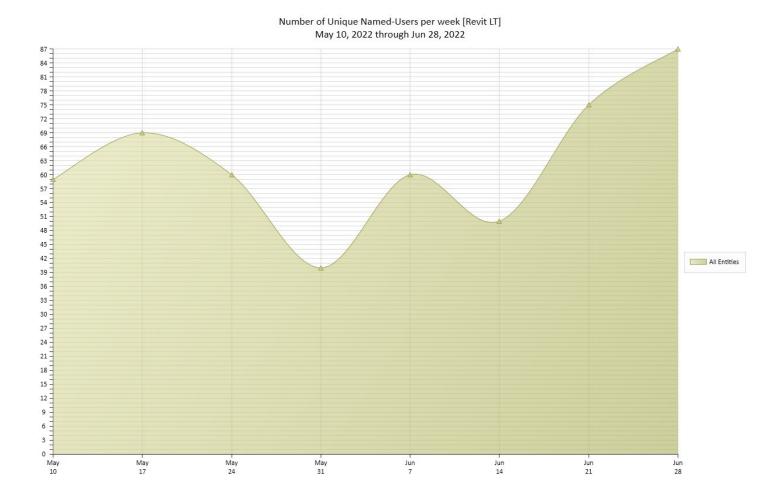




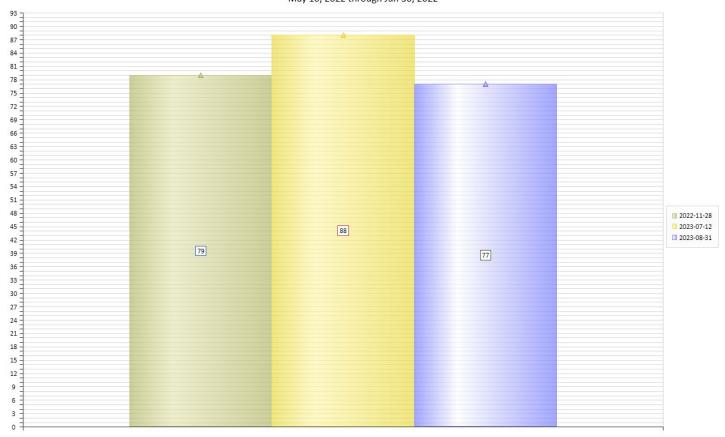
If the above chart includes Network licenses, the serial number will be shown as the License Model.

Sample result for seleted Autodesk® application (Revit LT):

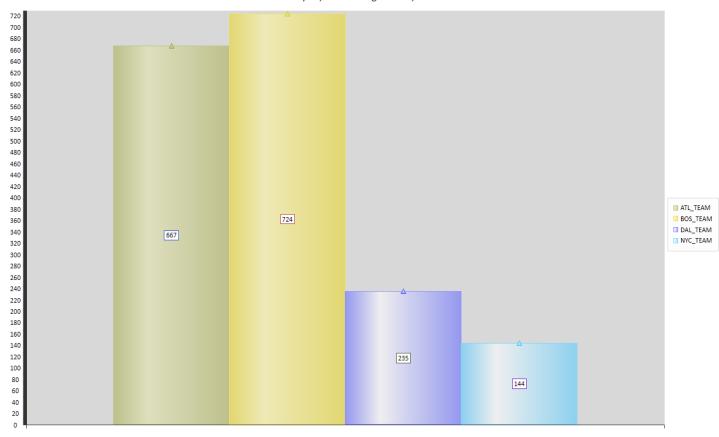




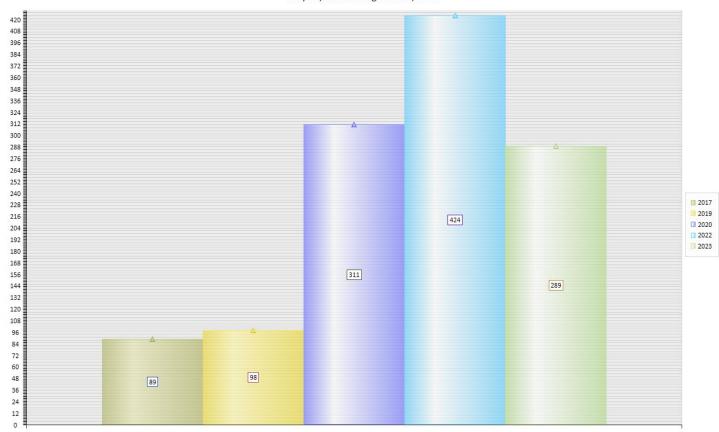
Days of Autodesk usage per License Pool Expiration for Revit LT May 10, 2022 through Jun 30, 2022



Count of Unique Users by Entity for Revit LT May 10, 2022 through Jun 30, 2022



Versions + (Number of Usages > 5 minutes) for Revit LT May 10, 2022 through Jun 30, 2022



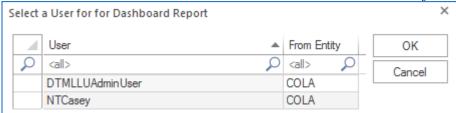
TCP/IP User After Hours Upload+Download Charts [Selected User]

This Dashboard creates 4 charts. This Dashboard searches by selected Date Range for all activity occurring between 6pm and 6am each day within the date range. For this report, the Chart Type and Chart Range fields are disabled. The Chart Range of "Top 15" is always used.

Click on the Chart Category to select the User to chart:

Configure Dashboard 1: TCP/IP User After Hours Upload+Download Charts [Selected User] Ŧ Chart Type: Chart Palette: Chart Range: Chart Category: Bar Chart Palette 1 Top 5 ... Configure Dashboard 2: Select Software Category NONE Click this button to select Software Category Chart Palette: Chart Type: Chart Range:

After clicking the Chart Category a new window will appear:



Select a user to chart.

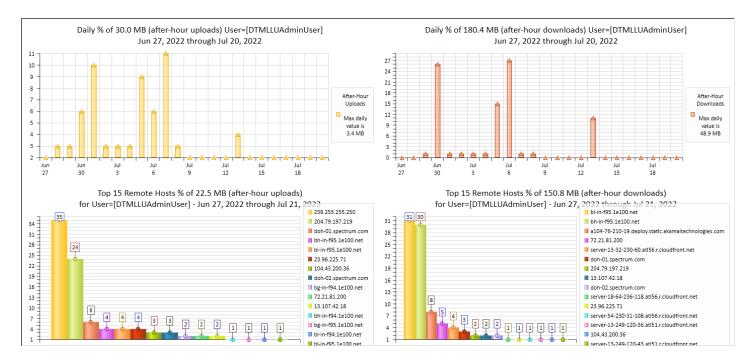
This Chart is built using a "SQL Stored Procedure" named TCPUDP_T30. This stored procedure is created by the SofTrack Console when creating or updating the SOFTRACK_ENTITY Database. The "After Hours" indication denotes activity occurring between 6pm and 6am on any day.

Additionally this report does not include non-routable TCP/IP address ranges, thus this report only reflects upload and download acitivity to addresses outside your private network. The specific TCP/IP address ranges excluded are:

10.n.n.n 192.168.n 172.16.n.n

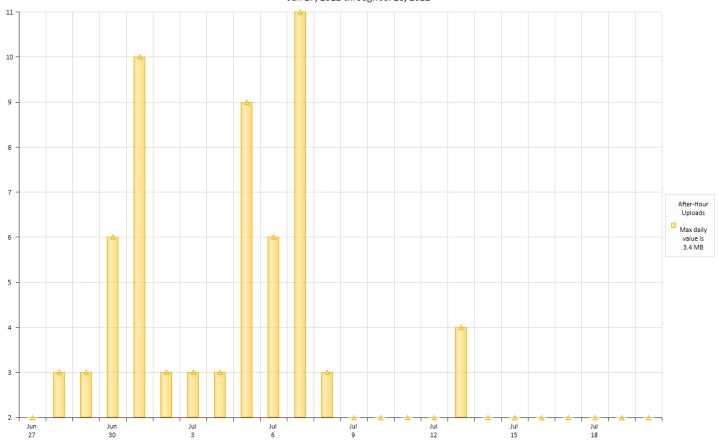
The Charts will automatically be created "per day" if the number of days charted is less than 32, will use "per week" if the number of days is less than 90 and otherwise, will chart activity "per month".

Sample Charts:

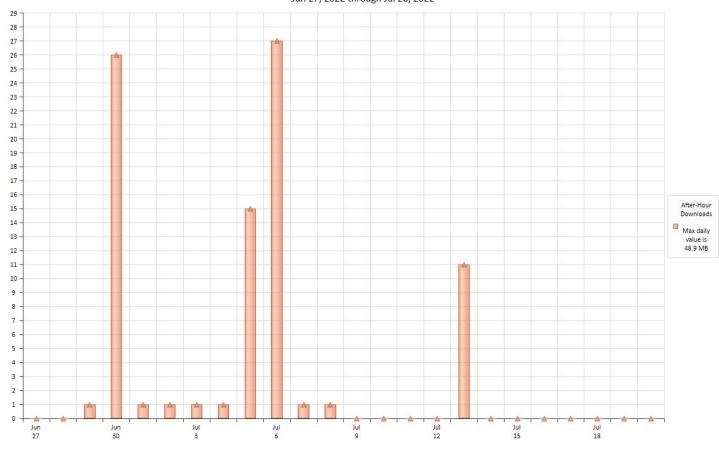


The following shows each individual chart:

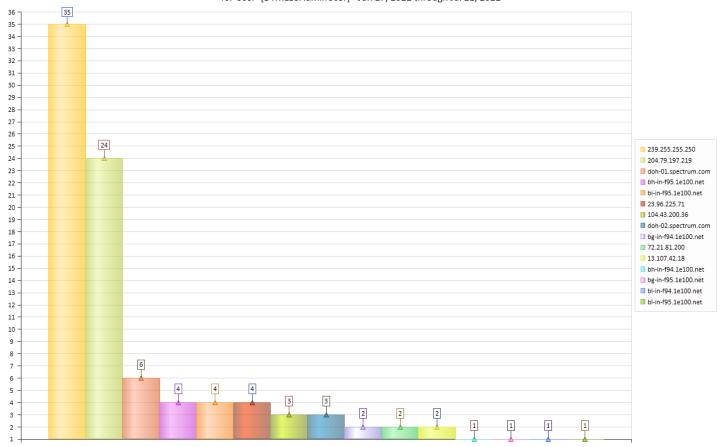
Daily % of 30.0 MB (after-hour uploads) User=[DTMLLUAdminUser] Jun 27, 2022 through Jul 20, 2022

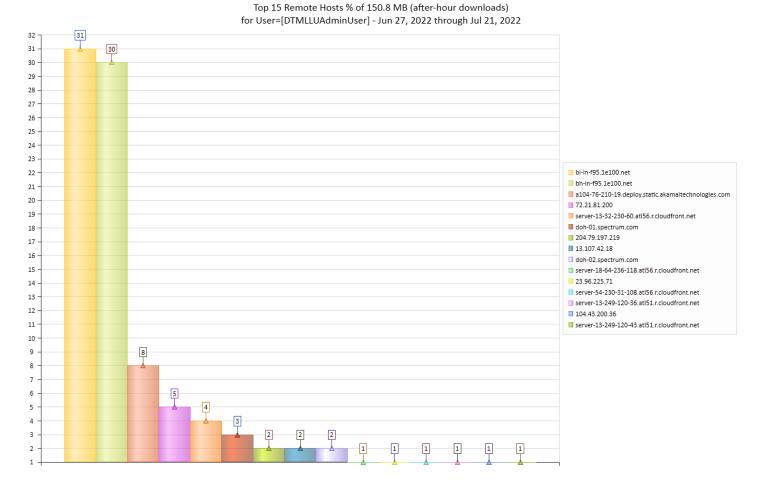


Daily % of 180.4 MB (after-hour downloads) User=[DTMLLUAdminUser] Jun 27, 2022 through Jul 20, 2022



Top 15 Remote Hosts % of 22.5 MB (after-hour uploads) for User=[DTMLLUAdminUser] - Jun 27, 2022 through Jul 21, 2022





Notice that each chart references a percentage (%) of a total value. The chart bars graphed each represent a percent of the total amount. Due to the possibility of a wide range of values (from zero to trillions), a conventional bar chart of absolute values is not possible.

TCP/IP Top Users Upload Activity

This Dashboard searches by selected Date Range for all activity occurring at any time during the selected date range.

The SQL Query is based on the following:

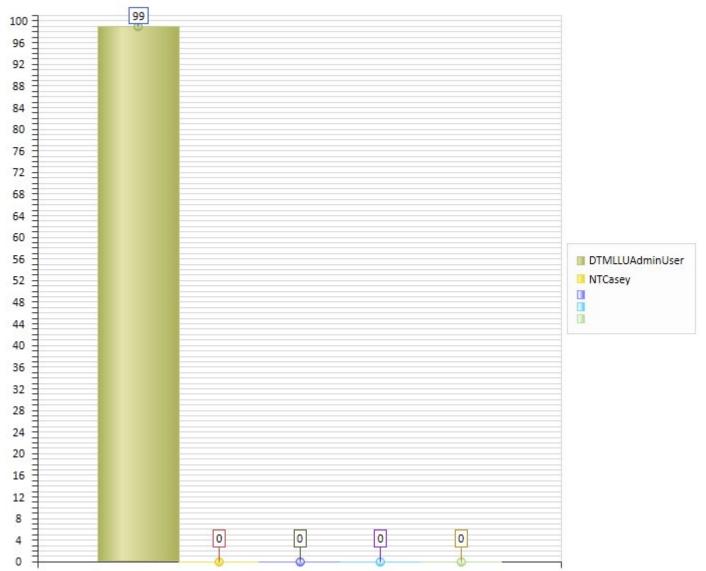
SELECT DISTINCT TOP 15 Username, SUM(CAST(UploadedSizeBytes AS bigint)) As TotalUploadedBytes FROM [SOFTRACK_ENTITY_NAME].[dbo].[TCPUDP_STATS] WHERE ((ConnectionStartTime >= 'START_DATE) AND (ConnectionStartTime <= 'END_DATE)) GROUP BY Username ORDER BY TotalUploadedBytes DESC;

The START_DATE and END_DATE are not shown in this example; the placeholder values are shown where each will be included in the query. The date range specifically includes all usages that started or were occurring during the date range.

Sample Chart:

Top 5 Users by % of 916.6 MB (total uploads)

Top User: 916.3 MB Jun 25, 2022 through Jul 20, 2022



Notice that the chart references a percentage (%) of a total value. The chart bars graphed each represent a percent of the total amount with the Top User's value indicated in the chart title. Due to the possibility of a wide range of values (from zero to trillions), a conventional bar chart of absolute values is not possible.

TCP/IP Top Remote Port Upload Activity

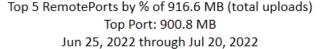
This Dashboard searches by selected Date Range for all activity occurring at any time during the selected date range.

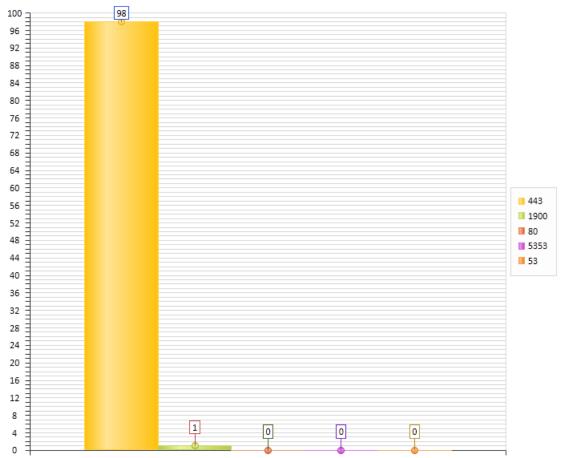
The SQL Query is based on the following:

SELECT TOP 15 RemotePort, Count(*) As NumberTimesPortUsed, SUM(CAST(DownloadedSizeBytes AS bigint)) As TotalDownloadBytes, SUM(CAST(UploadedSizeBytes AS bigint)) As TotalUploadBytes FROM [%s].[dbo].[TCPUDP_STATS] as TX WHERE ((TX.ConnectionStartTime >= 'START_DATE') AND (TX.ConnectionStartTime <= 'END_DATE')) GROUP BY RemotePort ORDER BY totalUploadBytes DESC;

The START_DATE and END_DATE are not shown in this example; the placeholder values are shown where each will be included in the query. The date range specifically includes all usages that started or were occurring during the date range.

Sample Chart:





Notice that the chart references a percentage (%) of a total value. The chart bars graphed each represent a percent of the total amount with the Top User's value indicated in the chart title. Due to

the possibility of a wide range of values (from zero to trillions), a conventional bar chart of absolute values is not possible.

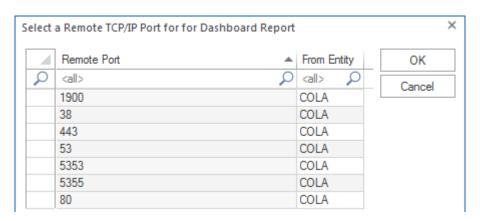
TCP/IP Remote Port Upload+Download + Remote Hosts Charts [Selected Port]

This Dashboard creates 4 charts. This Dashboard searches by selected Date Range for all activity occurring at any time during the selected date range. For this report, the Chart Type and Chart Range fields are disabled. The Chart Range of "Top 15" is always used.

Click on the Chart Category to select the Remote Port to chart:

Configure Dashboard 1: TCP/IP Remote Port Upload+Download + Remote Hosts Charts [Selected Port] Chart Palette: Chart Range: Chart Type: Chart Category: Bar Chart Top 5 Palette 1 Configure Dashboard 2: Select Software Category NONE Click this button to select Software Category Chart Type: Chart Palette: Chart Range:

After clicking the Chart Category a new window will appear:

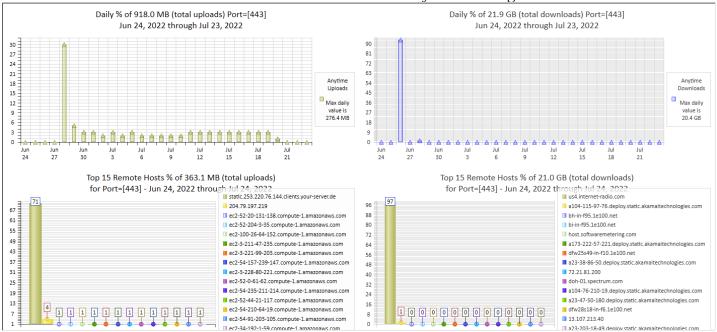


Select a Remote Port to chart.

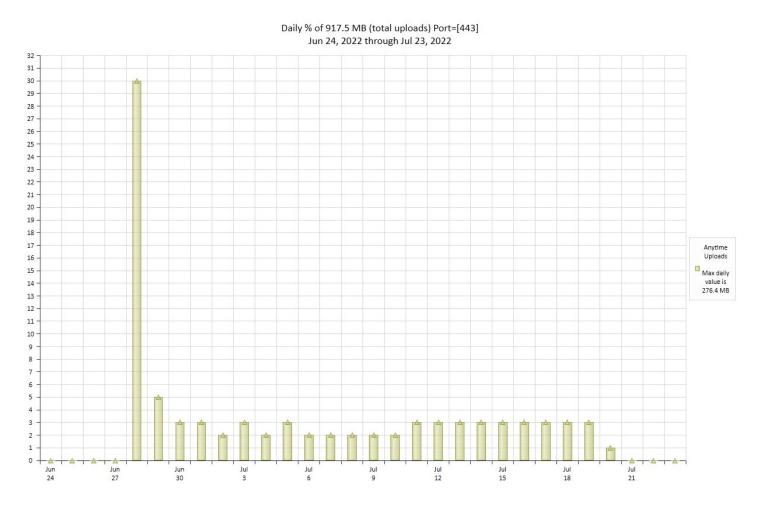
This Chart is built using a "SQL Stored Procedure" named TCPUDP_T33. This stored procedure is created by the SofTrack Console when creating or updating the SOFTRACK_ENTITY Database. The "After Hours" indication denotes activity occurring between 6pm and 6am on any day.

The Charts will automatically be created "per day" if the number of days charted is less than 32, will use "per week" if the number of days is less than 90 and otherwise, will chart activity "per month".

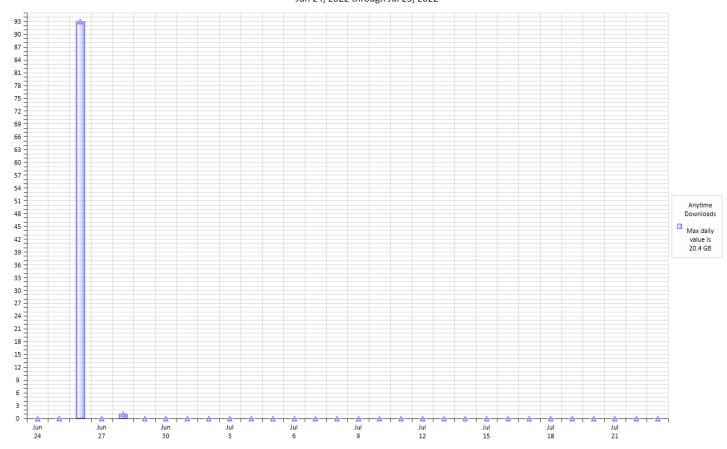
Sample Charts:



The following shows each individual chart:



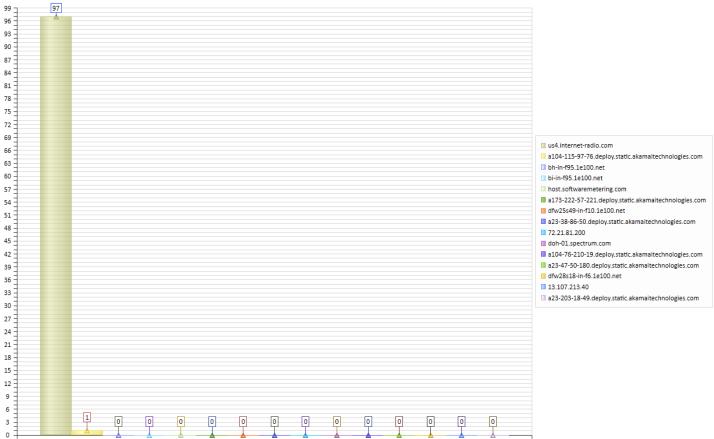
Daily % of 21.9 GB (total downloads) Port=[443] Jun 24, 2022 through Jul 23, 2022



Top 15 Remote Hosts % of 363.1 MB (total uploads) for Port=[443] - Jun 24, 2022 through Jul 24, 2022



Top 15 Remote Hosts % of 21.0 GB (total downloads) for Port=[443] - Jun 24, 2022 through Jul 24, 2022



Notice that each chart references a percentage (%) of a total value. The chart bars graphed each represent a percent of the total amount. Due to the possibility of a wide range of values (from zero to trillions), a conventional bar chart of absolute values is not possible.

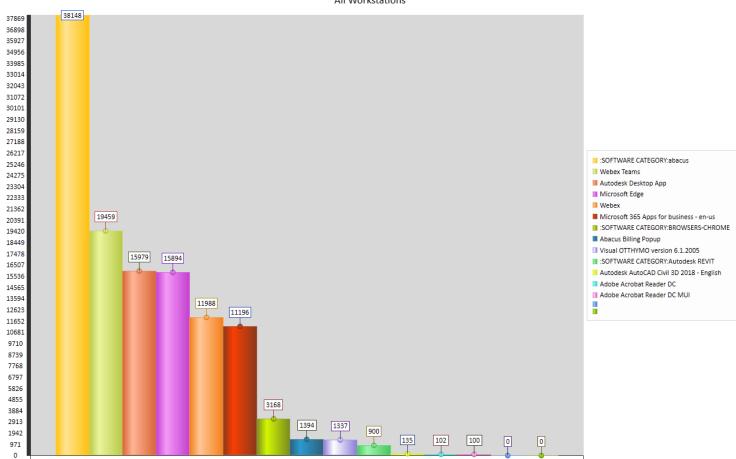
Top Applications by cost based on number workstations where installed

This Dashboard requires application cost values to be entered via the "Concurrent Usage (Summary+Costs)" report. If no application cost values exist, the report will not provide a result.

For application's with a cost value entered, this report will scan for each workstation, in each included Entity, that has any such application installed. This report does not include usage, only if installed.

The result will show the top 5, 10 or 15 applications by total cost as determined by the number of workstations where installed multiplied by the application cost.

A sample result:



Top Applications by cost based on number workstations where installed All Workstations

The value shown at the top of each bar is the total application cost. The chart above is for the top 15, but there are only 13 applications found with a cost *and* installed on one or more workstations. Any applications with a cost that are not installed on any workstation will be excluded from this report.

When defining this report, a date range is required, but it is not used. Thus, any date range can be supplied for this report and it will not impact the results.

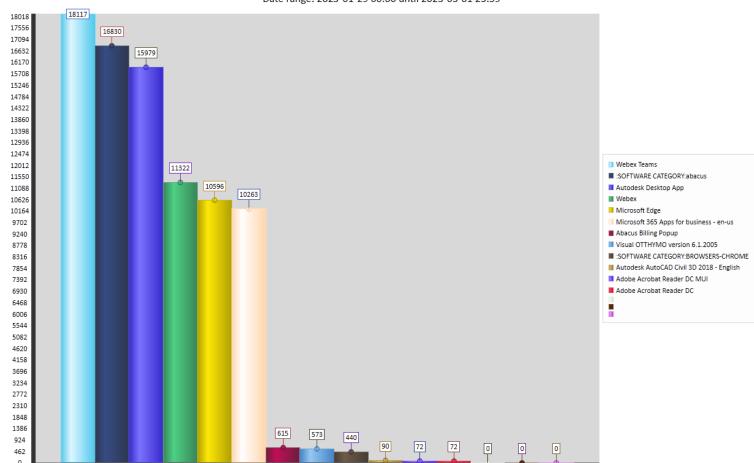
Top Applications by cost based on number workstations where used

This Dashboard requires application cost values to be entered via the "Concurrent Usage (Summary+Costs)" report. If no application cost values exist, the report will not provide a result.

For application's with a cost value entered, this report will scan for each workstation, in each included Entity, that has any such application installed and has been used during the reporting period.

The result will show the top 5, 10 or 15 applications by total cost as determined by the number of workstations where installed multiplied by the application cost.

A sample result:



Top Applications by cost based on number workstations where used Date range: 2023-01-29 00:00 until 2023-03-01 23:59

The value shown at the top of each bar is the total application cost. The chart above is for the top 15, but there are only 12 applications found with a cost *and* installed+usage on one or more workstations. Any applications with a cost that are not installed or used on any workstation will be excluded from this report.

When defining this report, a date range is required. The date range supplied will be used to determine if usage occurred. Only those workstations with usage during the selected date range will be included.

Daily Chart Specific EXE file(s) number of workstations where used

This Dashboard searches for usage of specific EXE file(s) within a selected Date Range. For this report, it will *only use* the Bar Chart format regardless of selection.

The SQL Query is constructed as shown in the following.

In this sample, highlighted in blue, the there are (5) EXE files being simultaneously graphed:

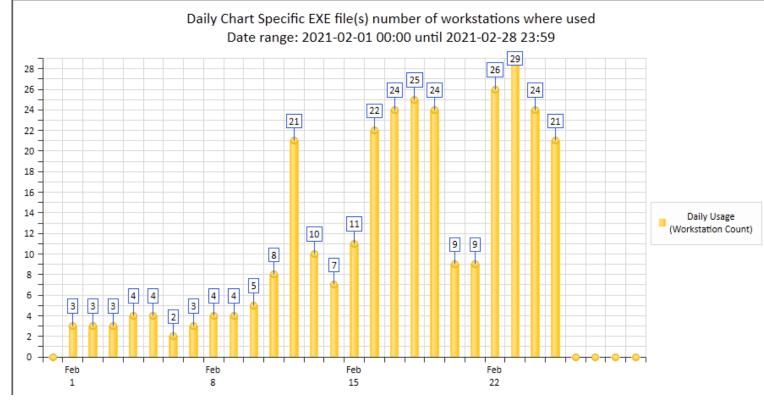
SELECT * from [SOFTRACK_ENTITY_TEST].[dbo].[ALL_SOFTWARE_USAGE] WHERE
RecordType=48 AND ((EXEName='acad.exe') OR (EXEName='acadlt.exe') OR
(EXEName='Acrobat.exe') OR (EXEName='AcroPlot.exe') OR (EXEName='AcroPlotMatrix.exe'))
AND ((EXEStartTimeUTC >= '2021-02-01 00:00' AND EXEStartTimeUTC <= '2021-02-28 23:59') OR

(EXEExitTimeUTC >= '2021-02-01 00:00' AND EXEExitTimeUTC <= '2021-02-28 23:59') OR (EXEStartTimeUTC < '2021-02-01 00:00' AND EXEExitTimeUTC > '2021-02-01 00:00'))

The Date Range is shown in the yellow highlighted section of the above example. The date range specifically includes all uses where the usage was occurring during any part of the date range. For this instance, if an application was opened on February 1 and closed on March 1 then any date range that includes those dates will include that usage. That includes a date range such as February 15 – February 21; this date range will include application usage that started prior and exited after the date range. Likewise, if a report includes the date range

The query results are then processed to determine the maximum usage per day for the combination of selected EXE files. This report can be for a single EXE file or multiple.







Reports Overview

SofTrack's Managed Assets interactive reporting provides several on-demand reports. Each report can be directly saved as html format (i.e. web page) and/or exported to CSV format.

Stand-alone Reporting Console

The stand-alone Managed Assets reporting console is provided by this file:

SofTrack MAReporter.exe

When opened it is presents only Managed Assets reporting options:



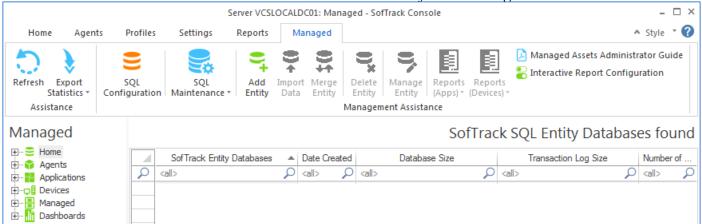
The Manage Entity ribbon button provides the user ability to configure email reporting.

The remainder of this Chapter describes the SofTrack Managed Assets Administrator Console and provides the same reporting functions as the stand-alone reporting console.

On-screen views

The Managed Assets section is located within the Managed tab of the SofTrack Console:

SofTrack Managed Assets Administrator Guide



Most of the built-in views provide reports (contained within a 'gridview') and each can be exported.

There are 6 main categories, Home, Agents, Applications, Devices, Managed and Dashboards. The following provides an overview of each section.

Home View

The **Home** view shows all SofTrack Entity SQL Databases and related statistics.

SofTrack SQL Entity Databases found

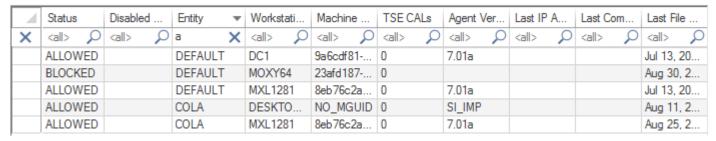
	SofTrack Entity Databases	•	Date Created		Database Size		Transaction Log Size		Number of Computers		
×	test	×	<all></all>	0	<all></all>	0	<all></all>	P	<all></all>	Q	
	SOFTRACK_ENTITY_TEST		2022-06-05 21:54:09		190.50 MB		92 MB		36		
	SOFTRACK_ENTITY_TEST03		2023-11-05 20:13:15		16.25 MB		6 MB		36		
	SOFTRACK_ENTITY_TEST2		2023-10-11 16:48:58		8.63 MB		< 1MB		36		

The Home section can be opened to reveal each separate Entity and its configuration.

Agents View

The Agents view shows all workstations for all Entities using the STSLAM agent and related statistics.

Agents for all Entities (Managed)



The Agents section can be opened to reveal each separate Entity and its specific list of workstations using the STSLAM agent. This sub-view includes the ability to create a custom STSLAM MSI specific to that Entity that can then be distributed to each workstation for installation/upgrade.

In the columns, the last two columns are Last Communication and Last File Upload. The Last

Communication indicates the most recent time a successful communication occurred using TCP/IP (to be successful the workstation must have an 'ALLOWED' license as shown in the first column). The Last File Upload column indicates either the last time a workstation journal file was manually copied to the STLOG\STSLAM folder for processing, or, when a workstation that was previously "BLOCKED" (as shown in the first column) has been successfully re-processed due to a license having become available and assigned to that workstation. The re-processing is possible because a BLOCKED workstation's activity journals are stored in the STLOG\STSLAM folder and are re-processed when a license becomes available.

Agents View for Entity(COLA)

4	Status		Disabl		Disabl		Disabl		Disabl		Disabl		Entity		Workstation		Machine G		TSE CALs		Agent Vers		Last IP Ad		Last C	omm	Last File U	
2	<all></all>	D	<all></all>	P	<all></all>	P	<all></all>	P	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q	<all></all>	Q								
	ALLOW	ED			COLA		DESKTO)P	NO_M	GUID	0		SI_IMP						Aug 11,	20								
	ALLOWED				COLA		MXL128	1	8eb76c	:2a	0		7.01a						Aug 25,	20								

Applications View

The **Applications** view shows a summary of all Applications installed plus workstation count for each. The Software Category column is customer-defined. *Please note, this list is not auto-populated, click the Refresh button at the upper left to build this list.*

Applications Installed; Applications Used for all Entities

	Application Name	Version	Publisher	Software Category	Workstation Count
Q	<all></all>	<all></all>	<all></all>	<all></all>	<all></all>
	Bentley V8i (SELECTseries 3) - Autode	8.11.9.303	Bentley Systems, Inc		1
	BIM Vision version 2.18.2.0	2.18.2.0	Datacomp Sp. z o.o.		1
	BlackBerry Desktop Software 6.1	6.1.0.35	Research In Motion L		1
	Bluebeam Revu eXtreme x64 2018.1	18.1.0	Bluebeam, Inc.		8
	Bluebeam Revu x64 2015.6	15.6.0	Bluebeam Software, I		1
	Bomgar Jump Client 16.2.1 [bomgar.br	16.2.1	Bomgar		1
	Bomgar Jump Client 16.2.2 [bomgar.br	16.2.2	Bomgar		1

The Applications section can be opened to reveal each separate Entity and its specific list of applications. There is an additional button to view each workstation for selected applications. Email Reminders can be configured for a specific application or any number of selected applications.

Applications Installed per Workstation for Entity(COLA)

4	Application Name	Version	Publisher	Software Category	Workstation Count
2	<all></all>	<all></all>	(all)	<all></all>	<all></all>
	7-Zip 9.20 (x64 edition)	9.20.00.0	Igor Pavlov	Licensed	44
	A360 Desktop	6.0.3.1100	Autodesk		5
	A360 Desktop	7.2.3.1800	Autodesk		2
	A360 Desktop	8.2.3.1800	Autodesk		2

Devices View

The **Devices** view shows a summary of the number of workstations and sessions found and the top 5 versions of Windows® operating system installed.

Device Summary for all Entities

4	Entity	Workst	Termin	Top Windows Version.1 ▼	T	Top Windows Versi	Т	Т	Т	Т	Т	Т
Q	<all></all>	<all></all>	<all></all>	<all></all>		<all></all>						
	SOFTRACK_ENTITY_D	1	0	Windows x64 Server 2012 St	1							
	SOFTRACK_ENTITY_N	2	0	Windows x64 7 Professional	1	Windows x64 Serve	1					
	SOFTRACK_ENTITY_T	5	0	Windows x64 7 Professional	3	Windows x64 10 Pro	2					
	SOFTRACK_ENTITY_T	5	0	Windows x64 7 Professional	3	Windows x64 10 Pro	2					
	SOFTRACK_ENTITY_C	4	0	Windows x64 7 Professional	4							

The Devices section can be opened to reveal each separate Entity and its specific list of workstations with details including recent user, and base machine configuration. Email Reminders can be configured for a specific device or any number of selected devices.

Devices for Entity(DEFAULT)

4	Workstation A		Workstation A		Machine GUID	Recent User	Description	n	TSEC	ALs	Serial Number		Make		Model		RAM
0	<all></all>	О	<all></all>	<all></all>	<all></all>	S	<all></all>	P	<all></all>)	<all></all>	Q	<all></all>	D			
	DC1		9a6cdf81-a950	TESTDOMAIN\Admi	<not set=""></not>		0		332VVV1		Dell Inc		Inspiron	6	8103		

Managed View

The <u>Managed view</u> provides ability to view and edit all Email Reminders. More importantly the Managed view provides the ability to create customized views of Applications and Devices including the ability to manually add Applications and Devices. Additionally, any detail (such as who installed, when will retire, etc.) and any and all records can be centrally stored for any Application and Device.

Dashboards View

The <u>Dashboards</u> view provides ability create an unlimited number of customized charts, each with up to 4 graphs. Each dashboard can be exported to HTML for easy sharing of vital reports.

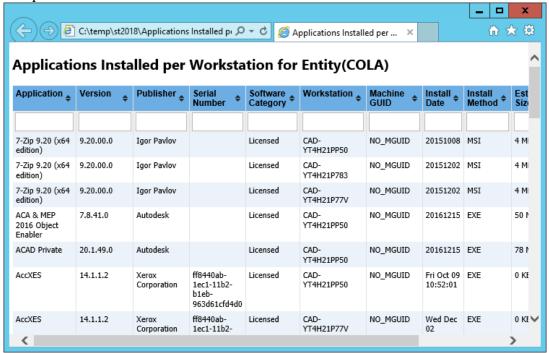
Exporting On-screen views

Each view has an Export button at the upper left that offers two reporting styles:

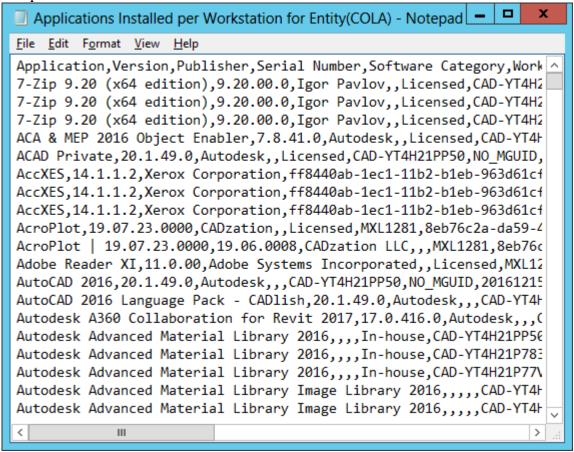




Sample of Sortable Html:



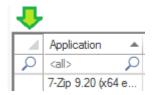
Sample of CSV:



Important:

The Export to CSV style will only include selected rows. If no rows are selected the report will be

empty. To select all rows, click the area at the top left of the grid:



On-Demand Reports

SofTrack provides the following built-in on-demand Managed Assets reports:

Application based reports:

- Audit Position Detail per Workstation
- Audit Position Summary per Application
- Concurrent Usage
- Application Costs
 - Concurrent Usage (Summary+Costs)
 - Installed Costs per Computer Detail
- No Usage
- Utilization Intelligence
- Application Security
 - Application Crashes (Werfault activity)
 - BSOD Workstation Blue Screen Crashes
 - CRACKED Applications used with failed digital signature
 - Applications used without digital signature
- Idle versus Active Summary
- Idle versus Active Summary
- Short Usages
- Excessive Idle
- Workstation Idle
 - Workstation Hourly Idle
 - Workstation Monthly Percent Active
- Application Camping Review
- User Day
 - User Day
 - User Daily Summary Active Usage per Application
- Workstation Usage
- Page Titles
 - Page Titles (Detail)
 - Page Titles (Summary)
- Acrobat DC Reports
 - Current Status Summary
 - Current Status Details
 - Cloud Logon History

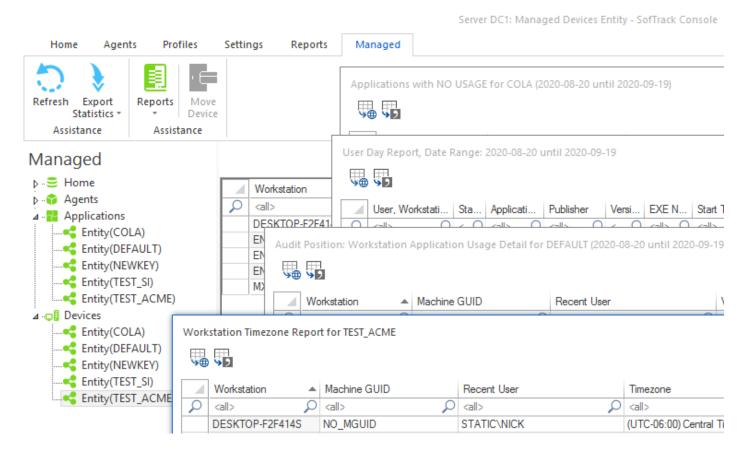
- Editing Tools Usage
- Autodesk® Named-User Reports
 - Combined User Usage Summary
 - License Pool Utilization Summary
 - User Activity Details
 - Autodesk Utilization Intelligence
 - Autodesk Plugin Utilization
- TCP/IP Data Transfers Summary and Details
- Installation and Latest Usage Report
- Specific EXE Usage
- Versions Report
- Installation Keys
- All Application Usage + Set Category
- Vendors
- SQL Server Reports
 - Summary+Detail Unique Users per SQL Instance
 - Summary+Detail Unique Users per SQL Database
 - Summary+Detail Unique Applications per SQL Database

Workstation based reports:

- Workstation Status
- Workstation CPU
- Workstation Disk Space
- Workstation Operating Systems
- Workstation Windows Updates + Installation Status
- Workstation Microsoft Cloud Joined
- Workstation Microsoft Cloud Joined + User Details
- Workstation Timezones
- User Logon Activity Reports
 - Basic Details (of each logon period)
 - Full Details (of each logon period)
 - Daily User Summary
 - Daily User Summary + Intraday
 - Weekly User Summary
 - Workstation Utilization
- SPLA User Logon Reports
 - Summary+Detail Unique Users [LDAP Logon Names only]
 - Summary+Detail Unique Users [Domain Logon Names only]
 - Summary+Detail Unique Users [All Logon types]
 - Summary+Detail Unique Users per Domain

Each of the above reports can be run for a single Managed Assets Entity or a combination of Entities. The ability to combine Entities for reporting enables a variety of reporting possibilities.

Each report is indpendent of the SofTrack Console. This enables multiple reports to be simultaneously opened:



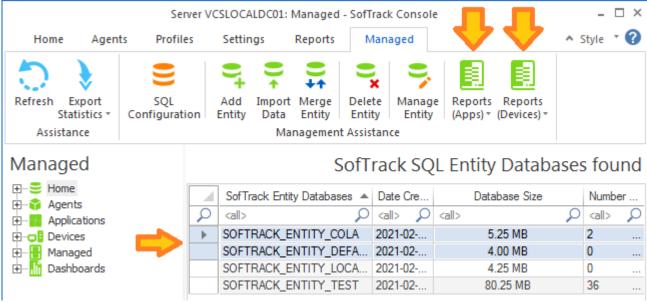
Notice the top left of each report window has two icons:

Audit Position: Workstation Application Usage Detail Report (2020-08-20 until 2020-09-19)

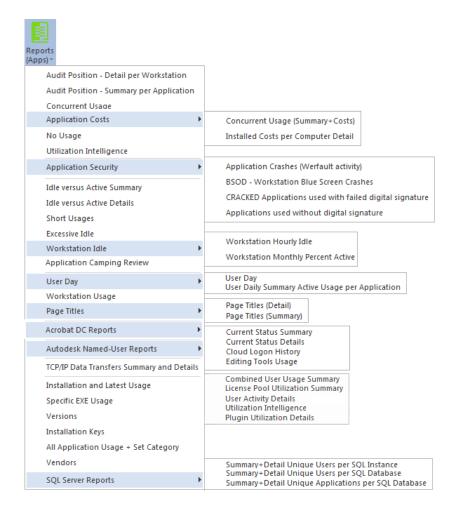


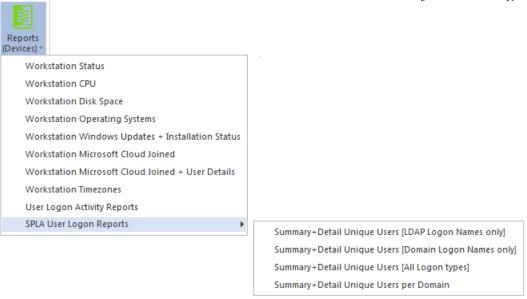
The first exports to an Html format (most are sortable) and the second exports to CSV format (for on-demand reports, all values are exported, no requirement to first select rows to be exported).

In the ribbon bar of the Home view there are two report buttons that provide the ability to combine data from multiple Entities into a single report:



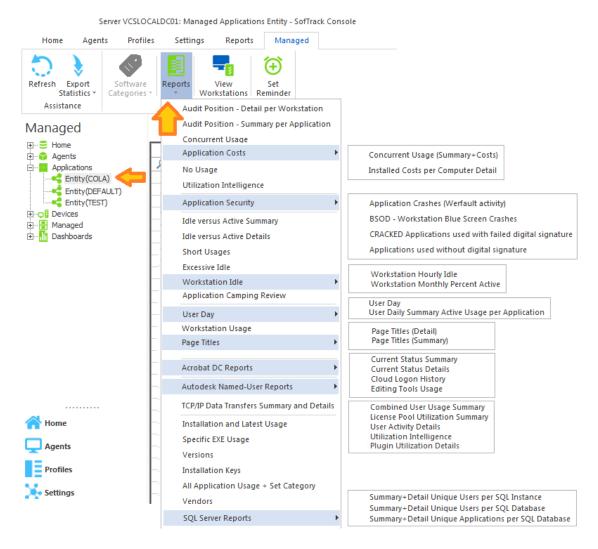
To begin, select the desired Entities to include. Next, select the Reports button and a drop down list of available reports will be presented:





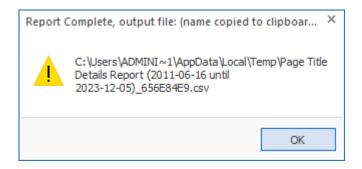
Each specific on-demand report is detailed in the next section.

As an alternative, when directly viewing a specific Entity a Reports button is also available:

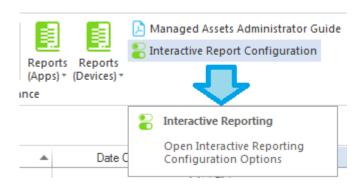


About interactive reports with more than 100,000 rows

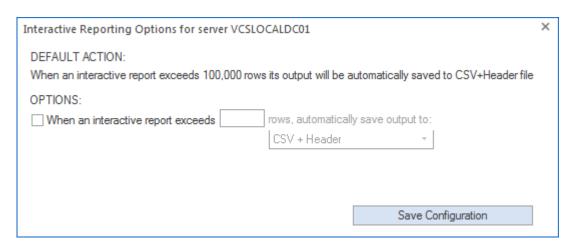
When interactive reports are run the result will contain rows of data. By default, when the number of rows exceeds 100,000 the report will be sent to a CSV file that includes a header row and when the report is complete the user will receive a pop-up similar to the following:



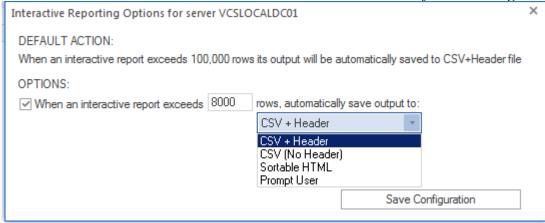
To change the default action, click on the ribbon button:



and the following will appear:



When the default is changed, it will affect all users running reports based on the current server.



The image above shows the default being changed to 8000 rows and offers several output possibilities. The *Prompt User* option will prompt the user for the output type to use when the number of rows defined (in this example, 8000) is reached during report generation. If the user clicks "cancel" on that prompt, the report will be aborted and currently gathered 8000 rows will be shown on the screen.

Once a report is completed there will be a popup message indicating the path where the output file is located, and, that filename will be copied to the clipboard (paste buffer) and can be used to open the file or its path.

General notes for reports

If the Application Name column value has a "pipe" symbol (|) such as "App | 7.3.3.1" this indicates the Application was detected as being installed on that workstation and the value shows the Application Name and its version that was installed. If present, the column 'EXE Version' is more specific as to the version that was being used.

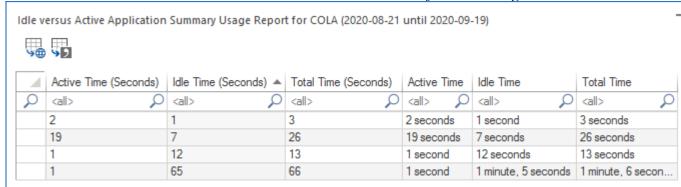
When shown, the 'Idle Time' value is collected by the ST_SLAM agent and represents the amount of time the application was in-use but not the focus of the user's desktop.

Several reports include these columns:

Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

These columns seem redundant, however, the first set show raw numbers with no formatting which can be useful as an export value. The second set of columns are the same values shown with formatting. For example:

Example showing Active, Idle, Total columns with formatting:



In reports that indicate the 'Entity' column is only included when reporting from multiple Entities in the same report.

Each Report can be cancelled/aborted while the being built by clicking a button provided on the window or by clicking the [x] button in the top right corner of the report window.

The following provides details of each on-demand report.

Application Report: Audit Position - Detail per Workstation

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Columns included:

Entity, Workstation, Machine GUID, Recent User, Vendor, Application, Version, Installation Date, Inventory Scan Discovery, Active Usage Discovery, Software Category, Usage Count, Most Recent Usage

The Entity column is only included when reporting from multiple Entities in the same report.

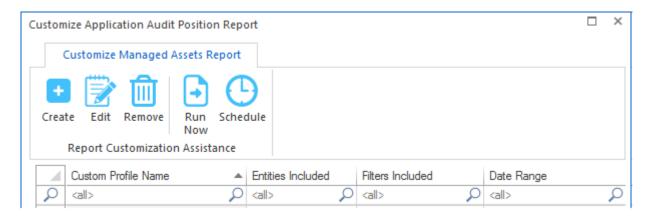
The column "Inventory Scan Discovery" indicates the application was located via the workstation application inventory provided by the <u>INVENTORY APP Table</u>.

The column "Active Usage Discovery" indicates the application was located via the ST_SLAM agent activity tracking provided by the <u>ALL_SOFTWARE_USAGE Table</u>. If <u>Imported</u>, Smart

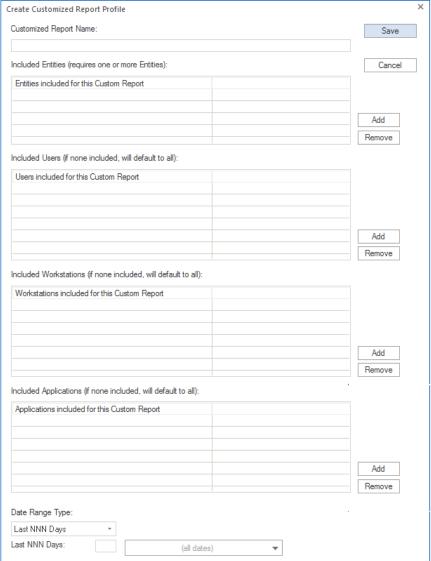
Inventory records are not included in "Active Usage Discovery" indication as each are initially found via Inventory Scan.

Application Report: Audit Position - Detail per Workstation - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

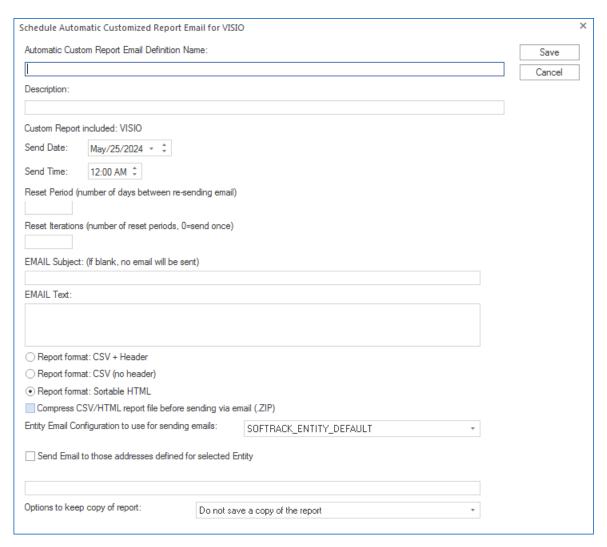
Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include

matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

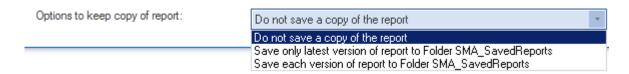
To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the

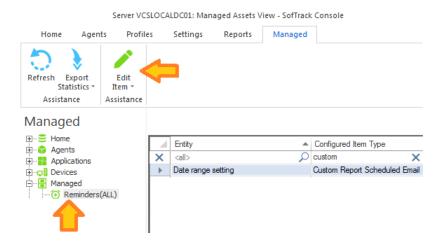
STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

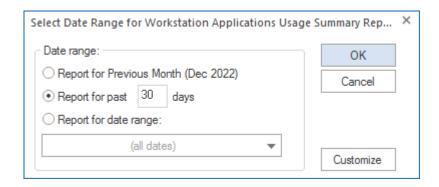
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Audit Position – Summary per Application

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Columns included:

Vendor, Application, Version, Inventory Scan Discovery, Active Usage Discover, Software Category, Workstation Count, Workstation Count Where Used

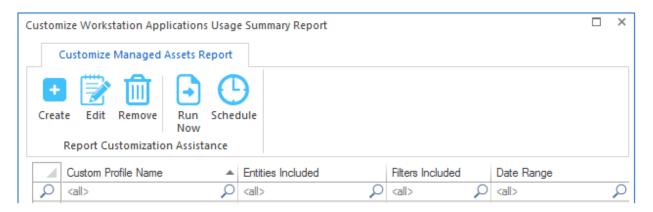
The column "Inventory Scan Discovery" indicates the application was located via the workstation application inventory provided by the INVENTORY APP Table.

The column "Active Usage Discovery" indicates the application was located via the ST_SLAM agent activity tracking provided by the <u>ALL_SOFTWARE_USAGE Table</u>. If <u>Imported</u>, Smart Inventory records are not included in "Active Usage Discovery" indication as each are initially found via Inventory Scan.

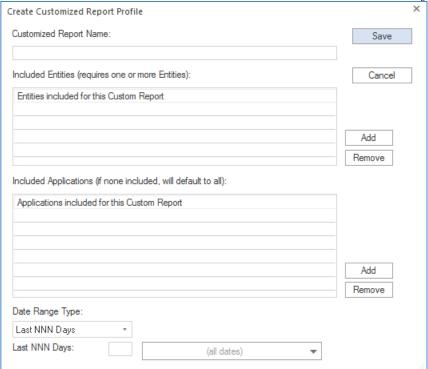
The "Vendor" column can be blank as some inventoried applications do not include Vendor/Publisher data.

Application Report: Audit Position - Summary per Application - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Applications
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Applications) will be determined by the Entities selected.

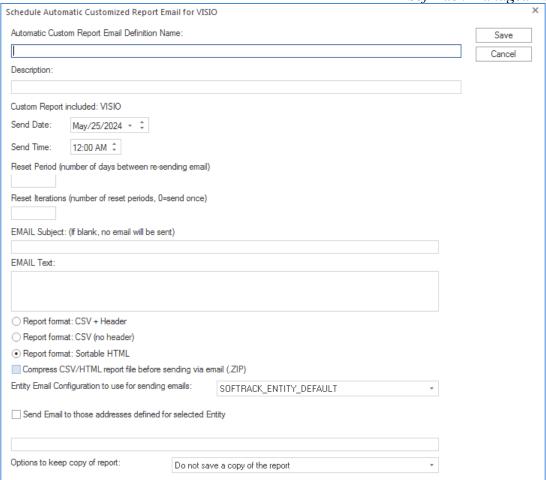
Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

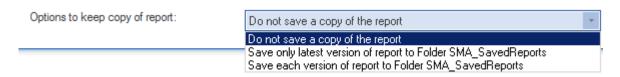
To Schedule, select a saved customized report and click the ribbon button and the following will appear:

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The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA_SavedReports folder (located at the SofTrack Server Agent Host):

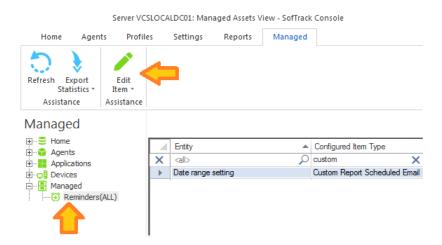


The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

You can create multiple schedules with different selections including different email addresses and output types.

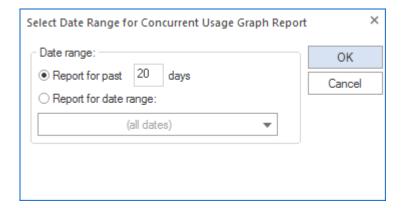
Once a Schedule is created, it can be viewed and edited in the Managed section within the

Reminders(ALL) selection:



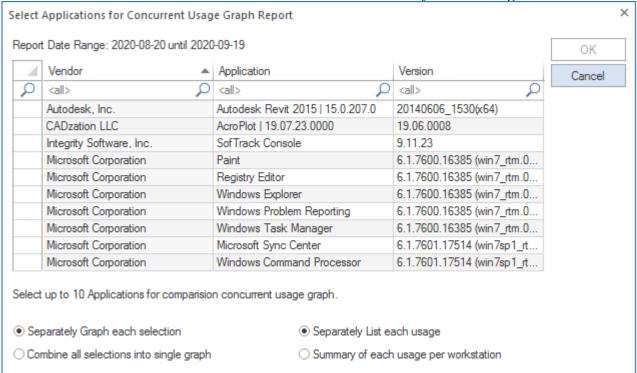
Application Report: Concurrent Usage

This report will begin by presenting a date range selector:



The maximum report period is 400 days.

Once selected another prompt is presented to select up to 10 Applications to graph:



The Applications listed are all the DISTINCT applications found in the ALL_SOFTWARE_USAGE Table(s). Additionally, any defined Software Categories will also appear in the list for selection. Each Software Category, if selected, will combine usage of all included Applications into a single chart item.

Columns include:

Entity, Vendor, Application, Version, Workstation, User, Start Time, Exit Time, Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

The Entity column is only included when reporting from multiple Entities in the same report.

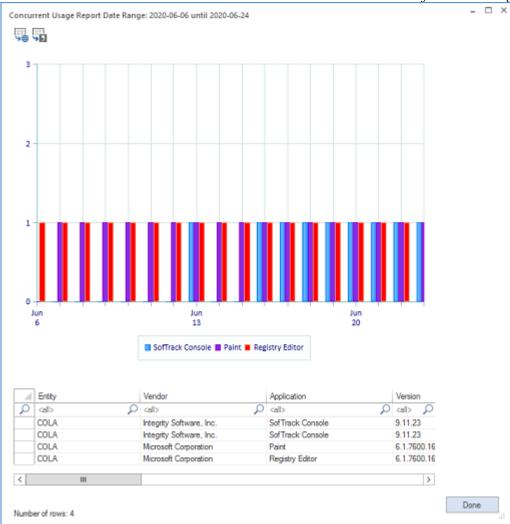
If the "Summary of each usage per workstation" is selected, the columns

Start Time. Exit Time

Are replaced with a singled column

Total Usages

Once selected, the report is created, sample result:

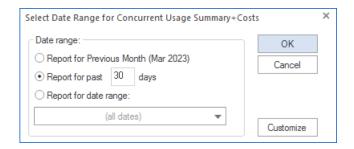


And, when exported to Html:



Application Report: Application Costs: Concurrent Usage (Summary+Costs)

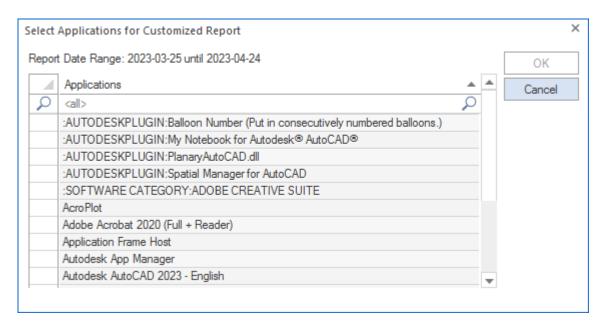
This report will begin by presenting a date range selector:



The maximum report period is 400 days.

Once selected another prompt is presented to select any number of applications, Autodesk Plugins

and Software Categories:



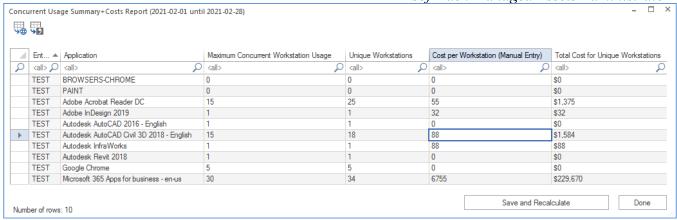
The Autodesk Plugins(and Addins) listed are all the DISTINCT instances found in the ADESK_PLUGINS Table(s). The Applications listed are all the DISTINCT applications found in the ALL_SOFTWARE_USAGE Table(s) – important – notice for each application listed there is no "pipe" symbol (|), that is intentional to allow make a single selection that will include all subversions of the selected Application. Additionally, any defined Software Categories will also appear in the list for selection. Each Software Category, if selected, will combine usage of all included Applications into a single line item.

Columns include:

Entity, Application, Maximum Concurrent Workstation Usage (value represents the maximum concurrent usage that occurred during the selected reporting period), Unique Workstations Count (number of workstations that had usage during the selected reporting period), Cost per Workstation (customer entered whole-number value directly into report, values are remembered in registry of SofTrack Server Agent), Total Cost for Unique Workstations (number of unique workstations * cost per workstation).

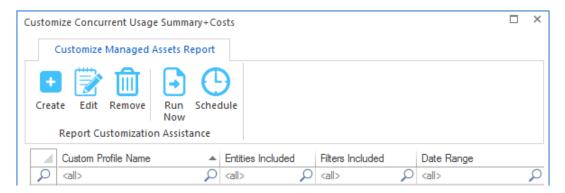
When entering or revising the Cost per Workstation, click the Save and Recalculate button to update the values shown.

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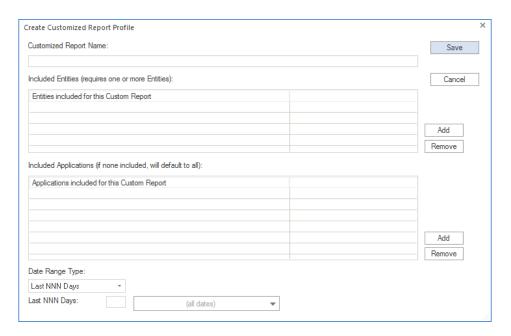


Application Report: Application Costs: Concurrent Usage (Summary+Costs) - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Applications (Autodesk Plugins, Applications, Software Categories)
- Date Range

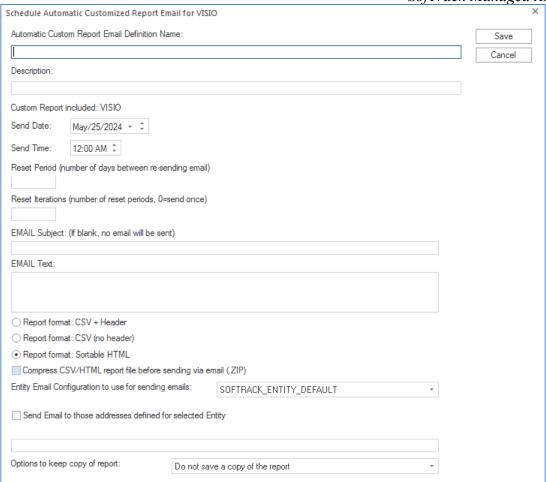
One or more Entities must be selected, and one or more Applications must be selected. The list of available Applications will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

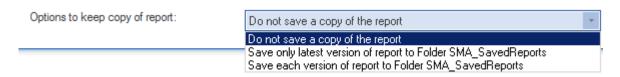
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA_SavedReports folder (located at the SofTrack Server Agent Host):

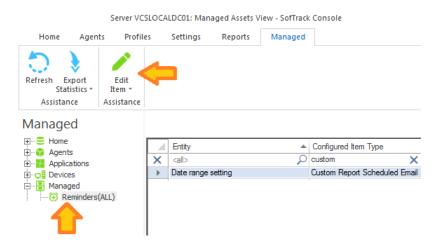


The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

You can create multiple schedules with different selections including different email addresses and output types.

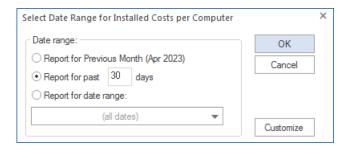
Once a Schedule is created, it can be viewed and edited in the Managed section within the

Reminders(ALL) selection:



Application Report: Application Costs: Installed Costs per Computer Detail

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

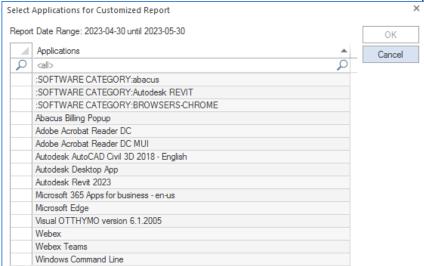
Once selected another prompt is presented to select any number of applications that have been previously defined with a cost including Software Categories. Use the "Concurrent Usage (Summary+Costs)" report to define application costs.

If no applications (or Software Categories) have had a cost associated, the following will appear:



If applications with a cost are found, the following will appear showing only the list of applications with a cost defined:

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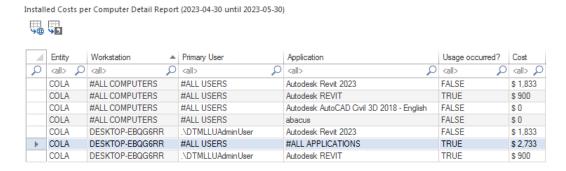
For the resulting report, columns include:

Entity, Workstation, Primary User, Application, Usage Occurred?, Cost

And then a separate summary row for each workstation totaling value for all applications installed. And then a separate summary row for all workstations per application.

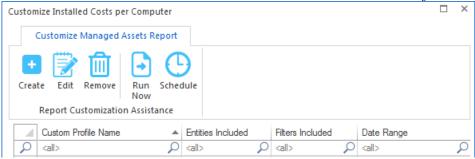
All selected applications are included, if no workstations are found where installed, each will appear on the #ALL COMPUTERS, #ALL USERS row with a Cost value of \$ 0.

Sample report:

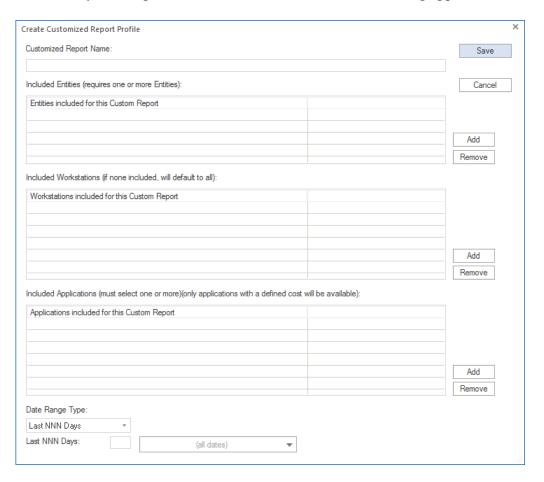


Application Report: Application Costs: Installed Costs per Computer Detail - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Workstations
- Applications (only those with a cost assigned)
- Date Range

One or more Entities must be selected, and one or more Applications must be selected.

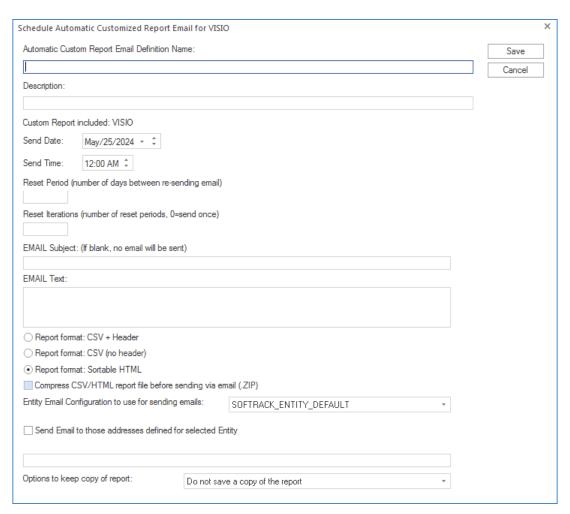
Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been

launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

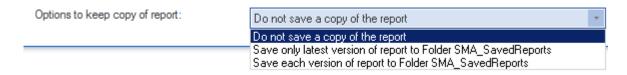
To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the

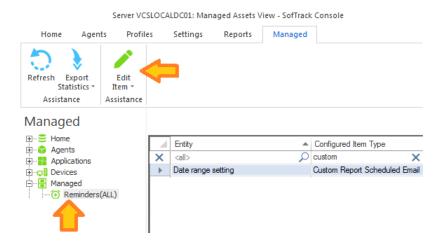
STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

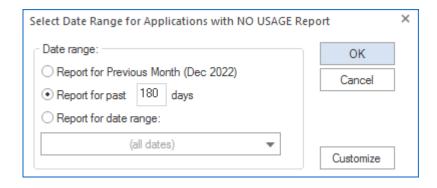
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: No Usage

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

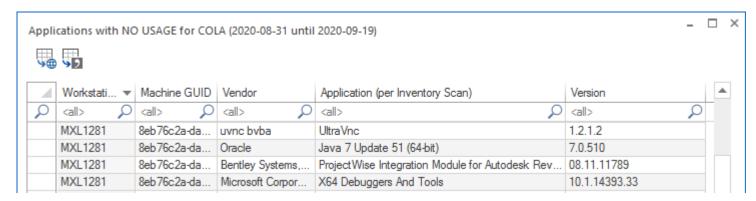
Columns include:

Entity, Workstation, Machine GUID, Recent User, Vendor, Application (per Inventory Scan), Version

The Entity column is only included when reporting from multiple Entities in the same report.

This report only refers to applications that have been installed per the records found in the INVENTORY_APP Table(s). Because this report is attempting to show installed applications with no usage, only applications known to have been installed are included.

Example:

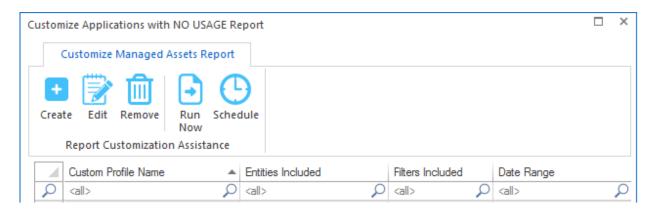


Notice in the example above, the "Java 7 Update 51" Application. It is likely this application has NO USER INTERFACE and as such, its usage will not be detected by the ST_SLAM agent. Usage may be detected if Smart Inventory records are Imported. Smart Inventory records can include usage of applications that do not have a user interface, however, not all applications are tracked, especially those related to system services or other system level activity.

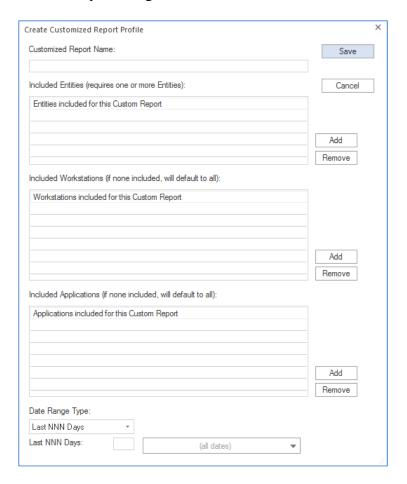
The NO USAGE report is intended to show "regular user applications" without any known usage during the reporting period.

Application Report: No Usage - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Workstations
- Applications
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Workstations, Applications) will be determined by the Entities selected.

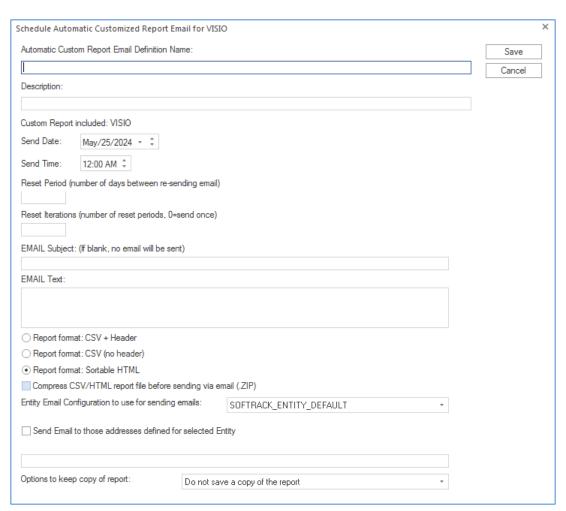
Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the

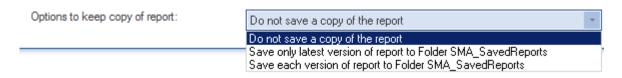
report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA_SavedReports folder (located at the SofTrack Server Agent Host):

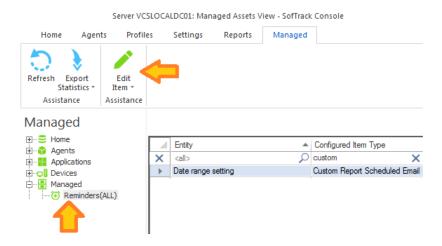


The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA SavedReports folder and to not send an email.

To set this ability, completely erase the Email Subject.

You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Utilization Intelligence

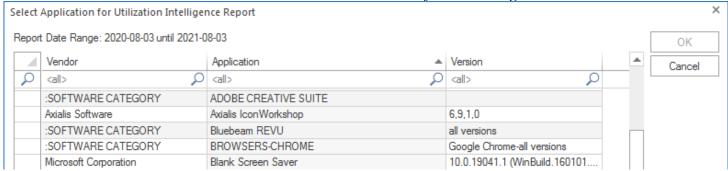
This report will begin by presenting a date range selector:



The maximum report period is 400 days.

After selecting the Date Range, the application or Software Category to report is choosen:

SofTrack Managed Assets Administrator Guide

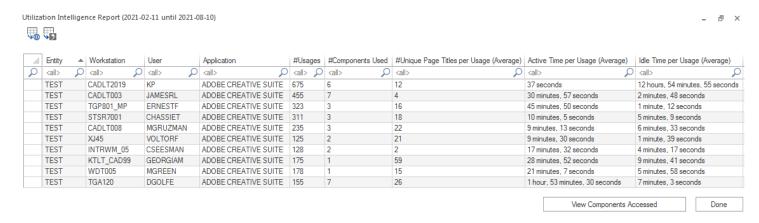


Notice, the Vendor column (in the above image) will indicate **:SOFTWARE CATEGORY** for a pre-defined software category. Otherwise, the Vendor column will indicate the actual application vendor.

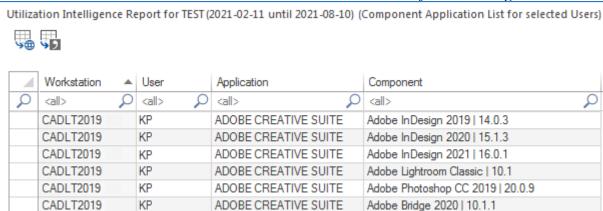
Columns include:

Entity, Workstation, User, selected Application, Number of Usages, Number of Components Used, Average Number of Unique Page Titles per usage, Average Active time per usage, Average Idle time per usage.

The Entity column is only included when reporting from multiple Entities in the same report.



The Components Used column will be 1 when an individual application is selected for reporting. When a SOFTWARE CATEGORY is selected, the Component Count will indicate the number of application components used. For example, Adobe Creative Suite is composed of 10 or more individual applications. The components can also represent different versions of the same application. The Component Count will indicate how many suite components (and different versions) were used. Further, there is a button on the report to view each component used:

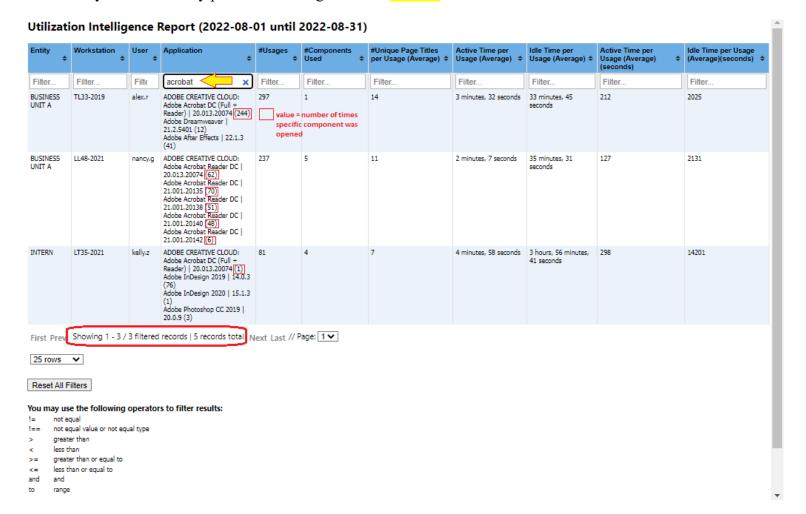


Application Report: Utilization Intelligence – Adobe Creative Cloud example

The following images show the HTML output of a Utilization Intelligence report for Software Category ADOBE CREATIVE CLOUD (customer created software tag/software category that includes selected Adobe products). Notice the Application Column, it reveals the Software Category name and is followed by each specific (individual) Adobe® suite component used during the reporting period plus the version of that component, followed by a count of the number times that component was opened:

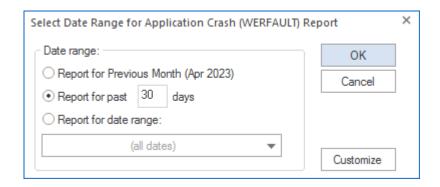
Entity \$	Workstation \$	User \$	Application	#Usages \$	#Components Used \$	#Unique Page Titles per Usage (Average) \$	Active Time per Usage (Average) \$	Idle Time per Usage (Average) \$	Active Time per Usage (Average) \$ (seconds)	Idle Time per Usage (Average)(seconds)
Filter	Filter	Filte	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
BUSINESS UNIT A	TL33-2019	alex.r	ADOBE CREATIVE CLOUD: Adobe Acrobat DC (Full + Reader) 20.013.20074 (244) Adobe Dreamweaver 21.2.5401 (12) Adobe After Effects 22.1.3 (41)	297	1	14	3 minutes, 32 seconds	33 minutes, 45 seconds	212	2025
BUSINESS UNIT A	LL48-2021	nancy.g	ADOBE CREATIVE CLOUD: Adobe Acrobat Reader DC 20.013.20074 (62) Adobe Acrobat Reader DC 21.001.20135 (70) Adobe Acrobat Reader DC 21.001.20138 (51) Adobe Acrobat Reader DC 21.001.20140 (48) Adobe Acrobat Reader DC 21.001.20140 (49)	237	5	11	2 minutes, 7 seconds	35 minutes, 31 seconds	127	2131
BUSINESS UNIT B	ML17-2020	perry.k	ADOBE CREATIVE CLOUD: Adobe Bridge 10.012.20041 (63) Adobe XD 44.0.12 (44)	107	2	1	1 minute, 58 seconds	3 hours, 12 minutes, 57 seconds	118	11577
EUROPEAN CENTER	HL14-2019	ralph.g	ADOBE CREATIVE CLOUD: Adobe Premiere Pro 14.013.20074 (41) Adobe Premiere Pro 15.001.20135 (9) Adobe Premiere Pro 15.002.20438 (33) Adobe Premiere Pro 22.001.20540 (10)	93	4	6	3 minutes, 50 seconds	1 hour, 27 minutes, 23 seconds	230	5243
INTERN	LT35-2021	kelly.z	ADOBE CREATIVE CLOUD: Adobe Acrobat DC (Full + Reader) 20.013.20074 (1) Adobe InDesign 2019 14.0.3 (76) Adobe InDesign 2020 15.1.3 (1) Adobe Photoshop CC 2019 20.0.9 (3)	81	4	7	4 minutes, 58 seconds	3 hours, 56 minutes, 41 seconds	298	14201

The following image includes annotations of what is being shown, including using the filter bar to only show when any product including the name *acrobat* was utilized.



Application Report: Application Security - Application Crashes (Werfault Activity)

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

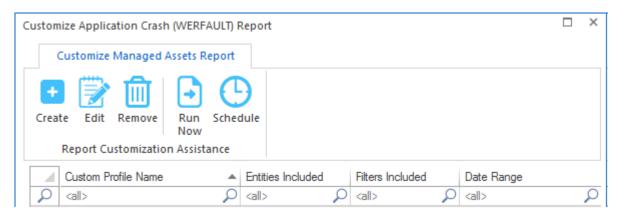
Columns include:

Entity, Workstation, User, Werfault Launch Path, EXE that crashed, EXE start time, EXE crash

time, EXE Fullpath, EXE Company, EXE Version, EXE Description, EXE Product Name, EXE Application

Application Report: Application Security - Application Crashes (Werfault Activity) - Customization

This report includes the ability to be customized (pre-filtering). You may want to schedule a daily report using a date range of the past day to always be aware of new application crashes occurring at your user workstations. When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

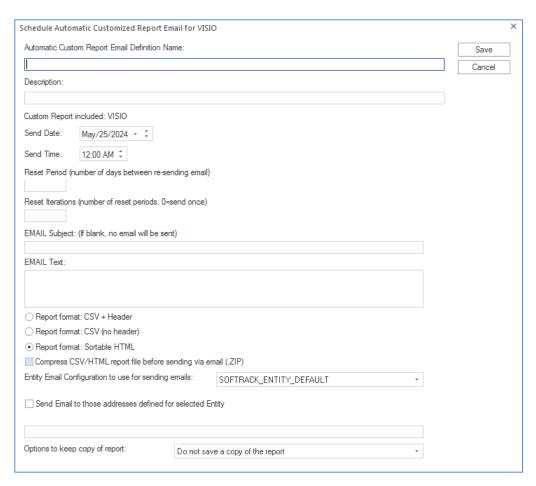
Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

The customized report is saved with a unique name (that you specify) and can be scheduled to

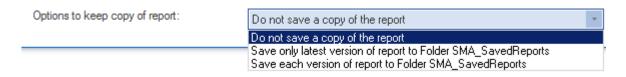
automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):

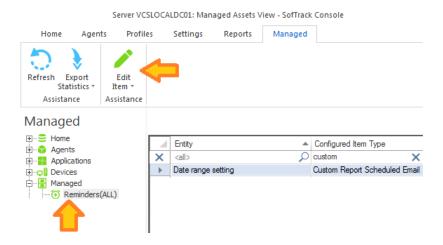


The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email.

To set this ability, completely erase the Email Subject.

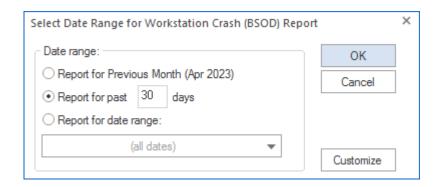
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Application Security - BSOD - Workstation Blue Screen Crashes

This report will begin by presenting a date range selector:



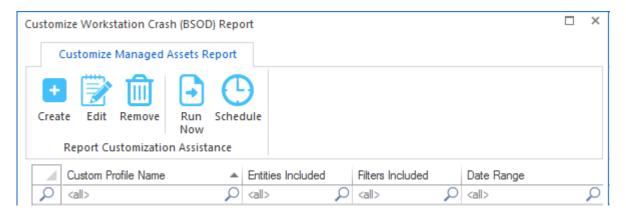
The maximum report period is 5000 days.

Columns include:

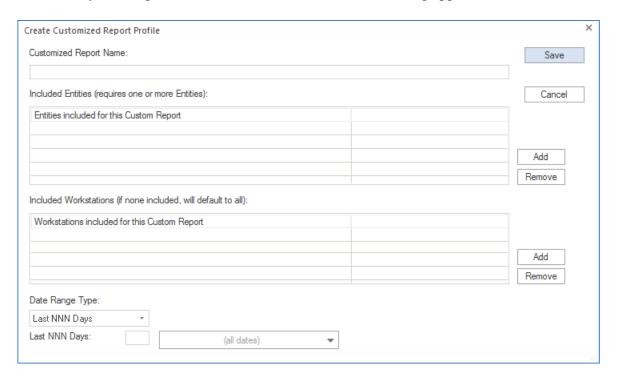
Entity, Workstation, Date of BSOD/Crash, Bugcheck Code, Size of MEMORY.DMP, Param1, Param2, Param3, Param4

Application Report: Application Security - BSOD - Workstation Blue Screen Crashes - Customization

This report includes the ability to be customized (pre-filtering). You may want to schedule a daily report using a date range of the past day to always be aware of new workstation crashes occurring at your user workstations. When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

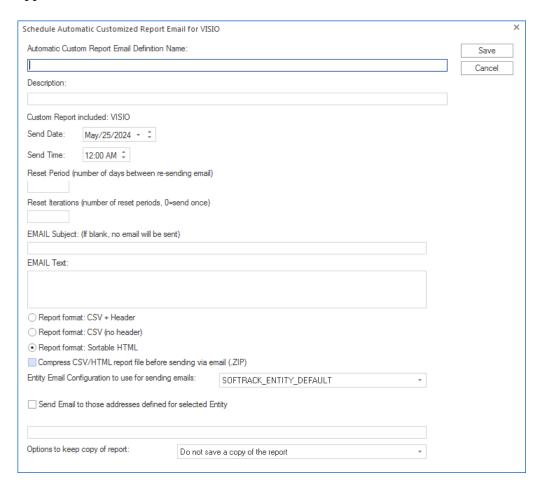
- Entities
- Workstations
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Workstations) will be determined by the Entities selected.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

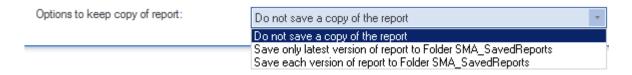
To Schedule, select a saved customized report and click the ribbon button and the following will

appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

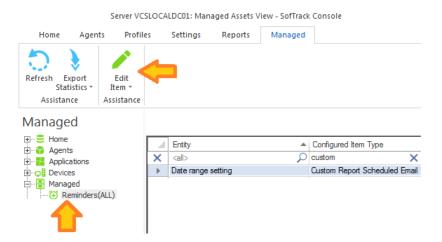
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

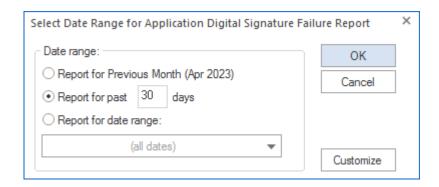
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Application Security – CRACKED Applications

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

A cracked application is one that has been digitally signed but the hash sequence fails, indicating the executable file has been modified subsequent to when it was digitally signed. A cracked application may contain unpredictable code with unexpected results. Additionally, some vendors such as Autodesk® will issue a financial penalty/fine for usage of any product that has been cracked/modified.

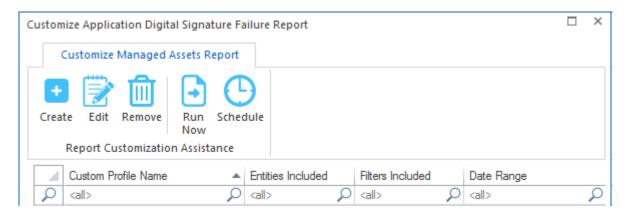
SofTrack uses default Windows® cryptography interfaces to determine if an application's digital signature is verified (or not) – this works for any application with a digital certificate regardless of the application vendor. SofTrack does NOT request verification from the application vendor nor does SofTrack report cracked applications to the application's vendor.

Columns include:

Entity, Workstation, User, Date of Cracked Usage, Cracked EXE, Signature Company, Signature Issued by, EXE Modification Time, EXE file size, EXE Fullpath, EXE Company, EXE Version, EXE Description, EXE Product Name, EXE Application

Application Report: Application Security - CRACKED Applications - Customization

This report includes the ability to be customized (pre-filtering). You may want to schedule a daily report using a date range of the past day to always be aware of new cracked application usages occurring at your user workstations. When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

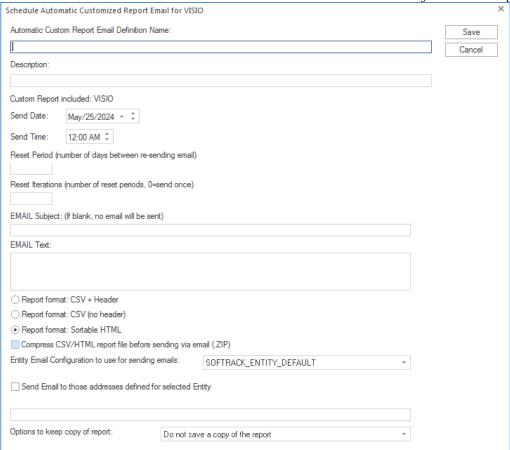
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

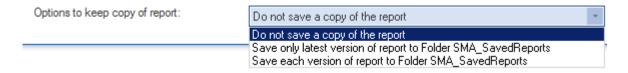
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

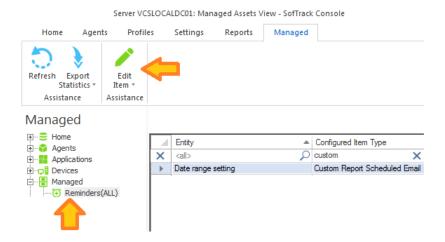
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

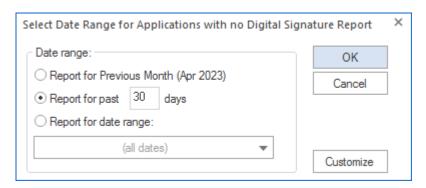
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Application Security - Applications used without digital signature

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

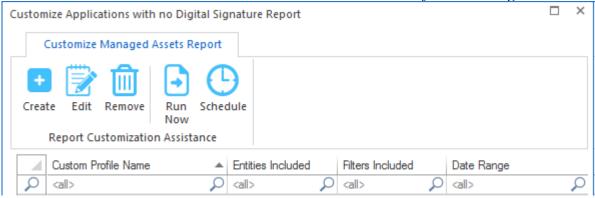
Columns include:

Entity, Workstation, User, Date of recent usage, Unsigned EXE, EXE Modification Time, EXE file size, EXE Fullpath, EXE Company, EXE Version, EXE Description, EXE Product Name, EXE Application

Application Report: Application Security – Applications used without digital signature - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:

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Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

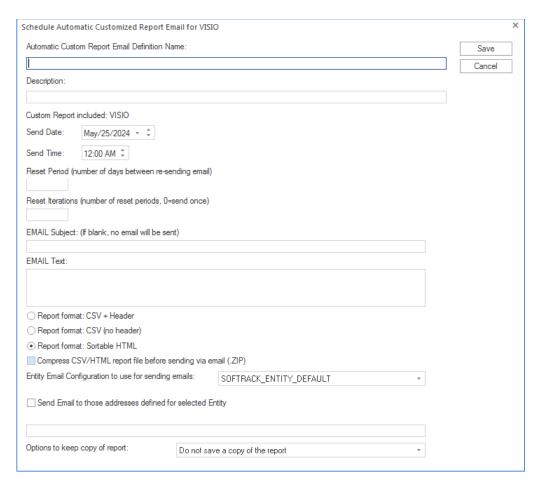
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

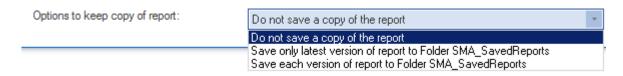
To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the

window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

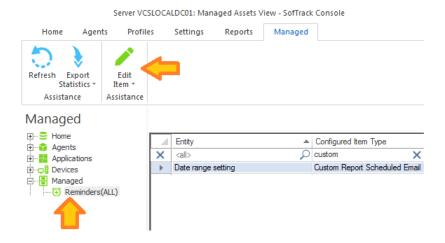
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

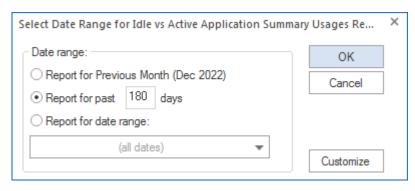
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Idle versus Active Summary

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Note: This report automatically reports for all existing Entities, not only the selected Entity. The resulting report shows 'CONSOLIDATE ALL ENTITIES' for the Entity name column.

Columns include:

Entity, Workstation, Machine GUID, User, Vendor, Application Name, EXE Filename, EXE Version, EXE Description, EXE Product, Total Usages, Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

The Entity column will show 'CONSOLIDATE ALL ENTITIES' for this report as all Entities are automatically included.

Notes:

The Application Name column can be blank as not all applications directly provide. The "EXE" columns refer to the data source being directly from the EXE (filename or from its resource header). If the Application Name value has a "pipe" symbol (|) such as "App | 7.3.3.1" this indicates the Application was detected as being installed on that workstation and the value shows the Application Name and its version that was installed. The columns that follow such as EXE Version are more specific as to the version that was being used.

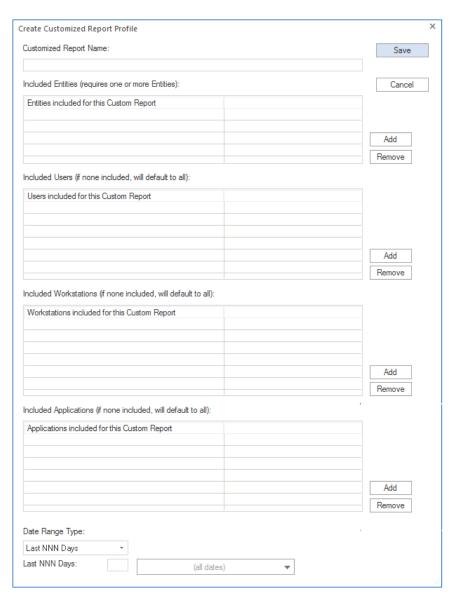
The Idle Time value is collected by the ST_SLAM agent and represents the amount of time the application was in-use but not the focus of the user's desktop.

Application Report: Idle versus Active Summary - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations

- Applications
- Date Range

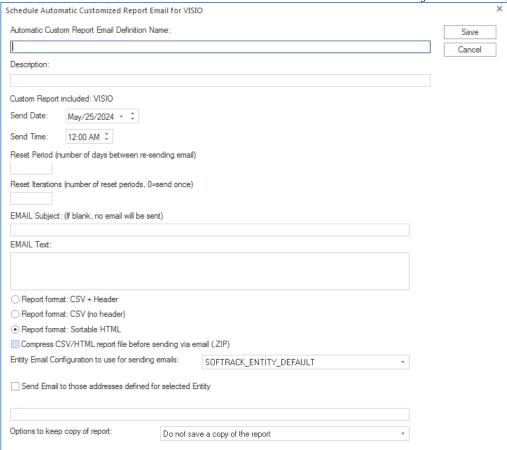
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

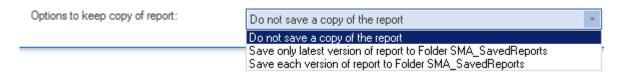
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

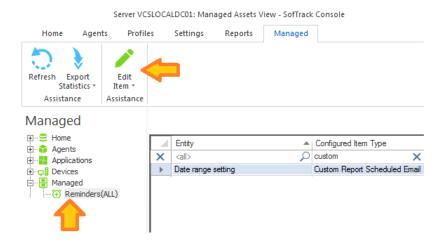
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

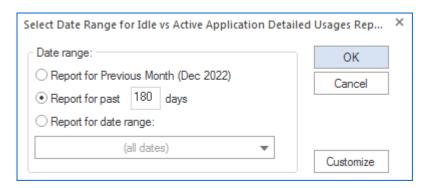
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Idle versus Active Details

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

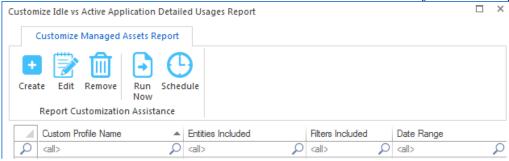
Columns include:

Entity, Workstation, Machine GUID, User, Vendor, Application Name, EXE Filename, EXE Version, EXE Description, EXE Product, Start Time, Exit Time, Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

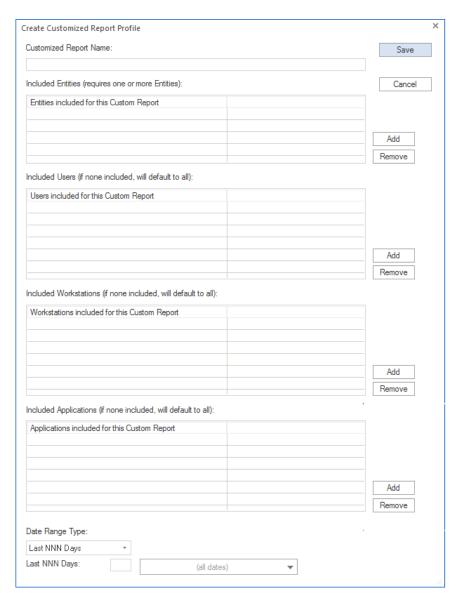
The Entity column is only included when reporting from multiple Entities in the same report.

Application Report: Idle versus Active Details - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications

Date Range

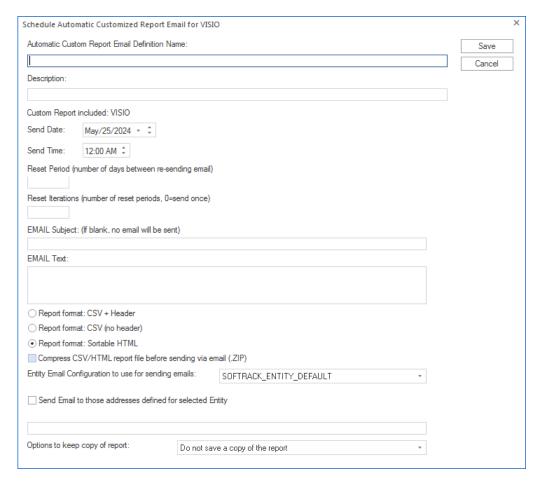
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

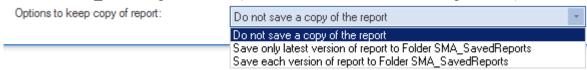
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

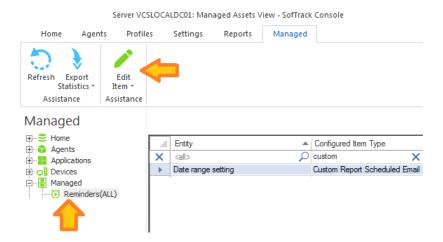
Additionally, the report can be configured to save a permanent file in the STLOG\SMA_SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

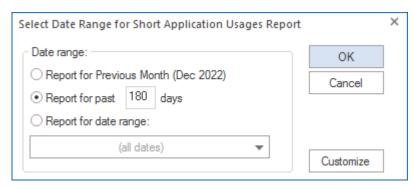
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Short Usages

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Columns include:

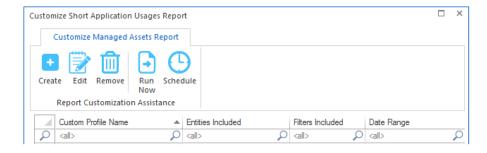
Entity, Workstation, Machine GUID, User, Vendor, Application Name, EXE Filename, EXE Version, EXE Description, EXE Product, Start Time, Exit Time, Active Time (seconds), Idle Time (seconds), Total Time (seconds)

The Entity column is only included when reporting from multiple Entities in the same report.

This report shows usages less than 60 seconds in length. This may indicate where a usage was blocked or the application crashed.

Application Report: Short Usages - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

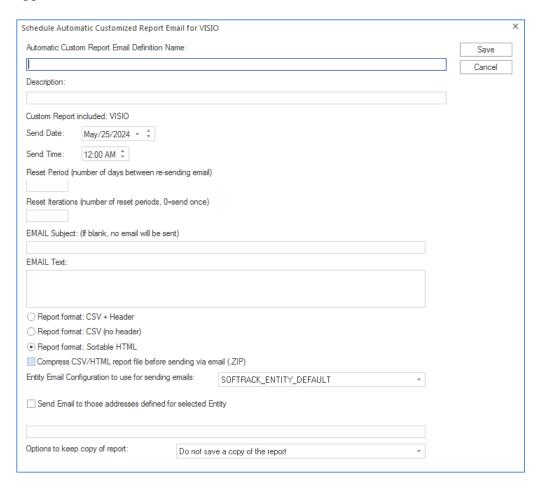
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

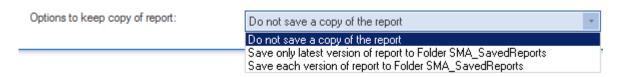
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):

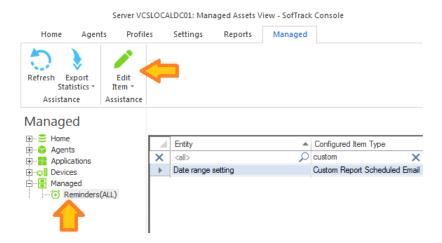


The default is to not save a copy. However, if an option to save is selected, the scheduled activity

can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

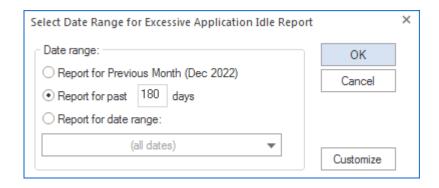
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Excessive Idle

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Columns include:

Entity, Workstation, Machine GUID, User, Vendor, Application Name, EXE Filename, EXE Version, EXE Description, EXE Product, Start Time, Exit Time, Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

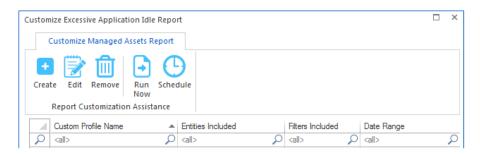
The Entity column is only included when reporting from multiple Entities in the same report.

This report shows usages with more time being idle than being active. This could indicate users "parking" applications. Note, if the application is "math intensive" the application could be spending

significant time computing values during which the user changes focus to other applications.

Application Report: Excessive Idle - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations

- Applications
- Date Range

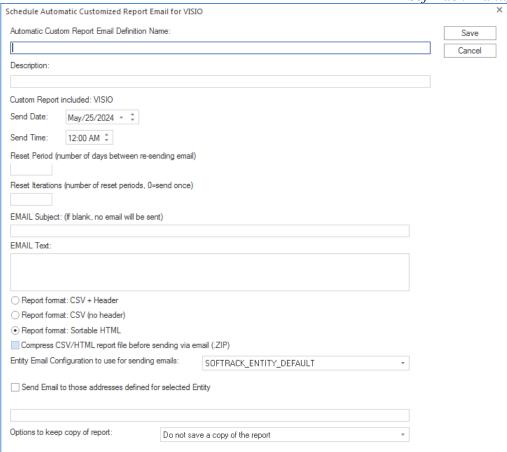
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

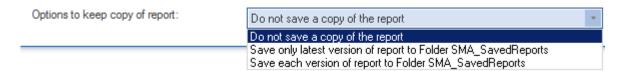
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

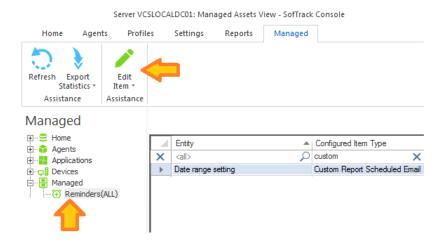
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

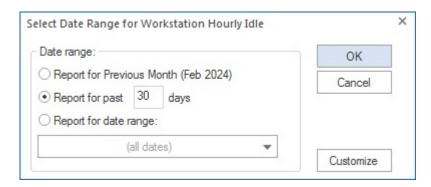
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Workstation Hourly Idle

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

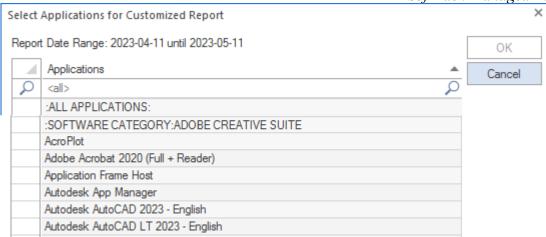
Columns include:

Entity, Application Name, Week Number, Day of Week, Time of Day (1 hour period), #Active Workstations, #Idle Workstations

The Entity column is only included when reporting from multiple Entities in the same report.

This report shows time periods (in one hour increments) the number of active workstations and the number of idle workstations for each selected application. There is a selection for ALL APPLICATIONS.

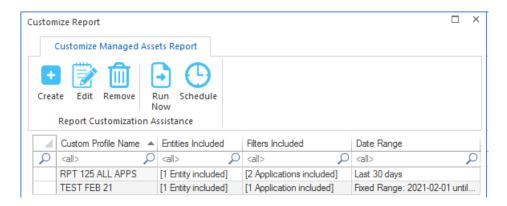
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A workstation is considered idle if it has 6 or fewer Page Title changes per any one hour period. The goal of this report is to identify when workstations and/or specific applications are relatively unused and would be a suitable time to apply updates.

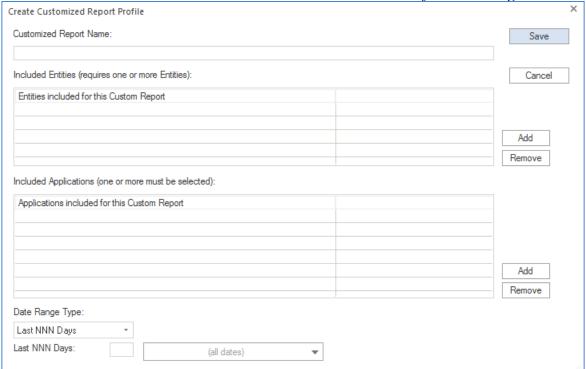
Application Report: Workstation Hourly Idle - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



The above image shows two previously created custom profiles.

Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Applications
- Date Range

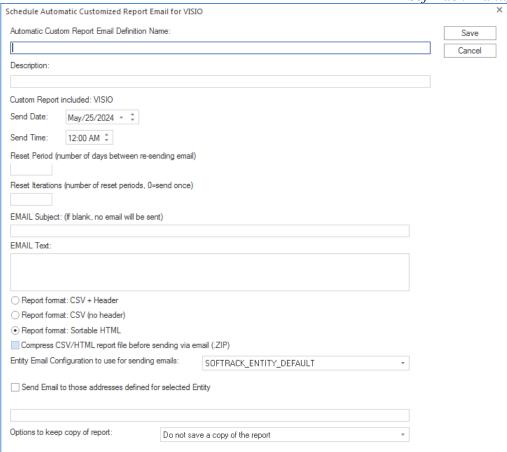
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

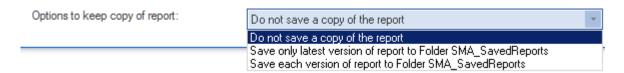
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

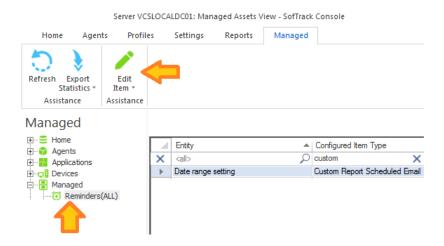
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

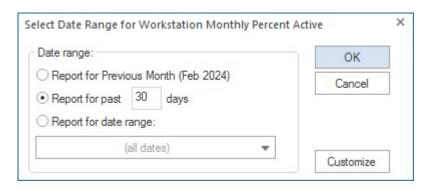
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Workstation Monthly Percent Active

This report will begin by presenting a date range selector:

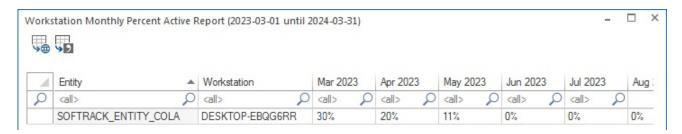


The maximum report period is 1100 days (3 years).

Columns include:

Entity, Workstation, Month #1 % Active, Month #2 % Active (...) up to 36 months

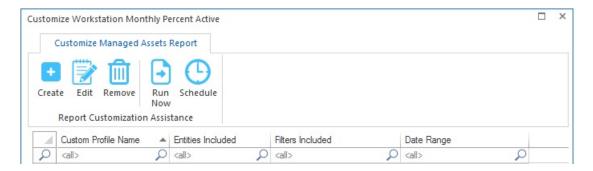
The Entity column is only included when reporting from multiple Entities in the same report.



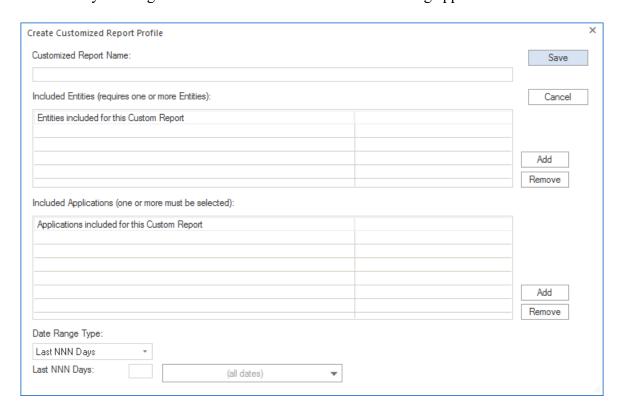
This report shows % active for each selected workstation during each indicated month. The resolution is one second. The non-customized report includes all applications *except* screen saver usage. To select applications use the Customize option.

Application Report: Workstation Monthly Percent Active - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Applications
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Applications) will be determined by the Entities selected.

When adding applications, there is an option

:ALL APPLICATIONS:

When this option is selected it will include all applications that had active time during the reporting period *except* screen savers. When this entry is added, do not include any other application as it will skew the results.

Important:

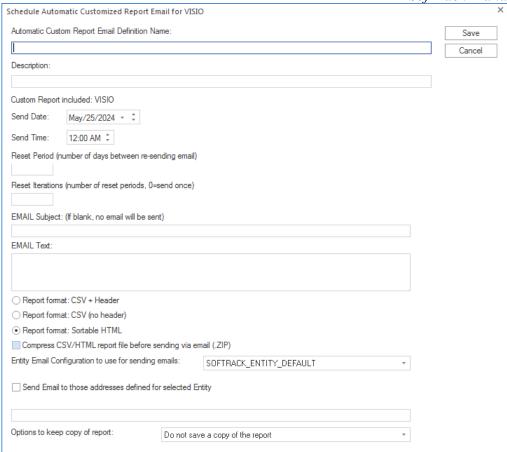
When selecting applications, the 'version' is not separately tracked. For example, if 'Google Chrome' is included and the applications added include various versions of Google Chrome, this will skew the results. This is because each application that is included is distilled down to the application filename without regard for version. Thus if 'Google Chrome' is included multiple times it will result in artificially increasing the % active time by redundantly including usage of the same application filename (i.e. 'chrome.exe') because every version of Google Chrome uses the same application filename (i.e. 'chrome.exe').

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

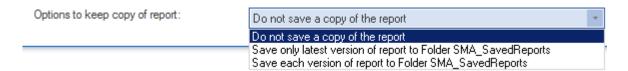
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

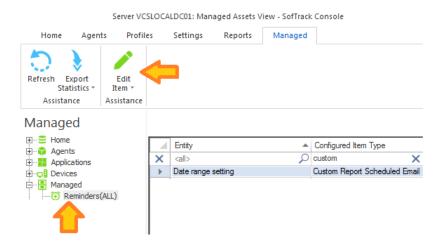
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

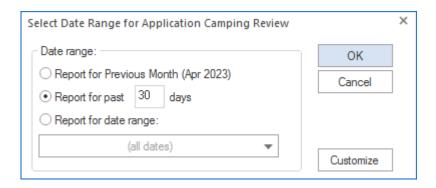
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Application Camping Review

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Columns include:

Entity, Application, User, Workstation, Days in Report, #Days with Activity, %Days with Activity, %Active Time (vs Idle), #Usages Total, #Usages <=5 minute total time, % of Usages <=5 minutes total time, #Usages <=5 Pages viewed, % of Usages <=5 Pages viewed, #Usages with excessive page view

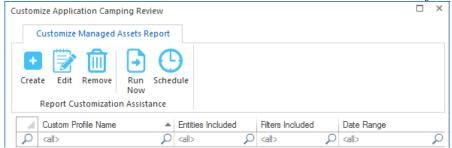
The Entity column is only included when reporting from multiple Entities in the same report.

Notes: "<=5" indiates "less than or equal to 5"; "excessive page view" indicates a single page was continuously viewed for 60 minutes or more, typically this indicates the user is no longer present at the workstation

Application Report: Application Camping Review - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:

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Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

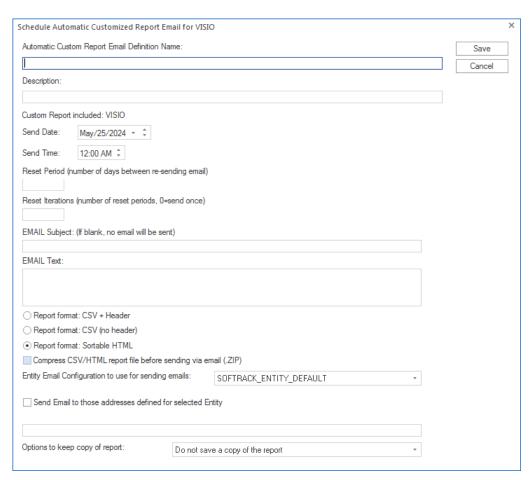
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

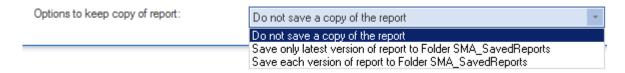
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

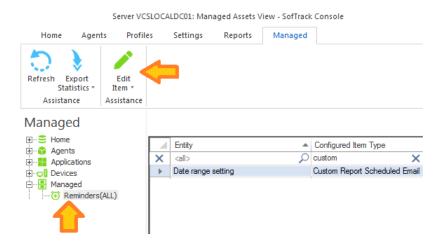
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

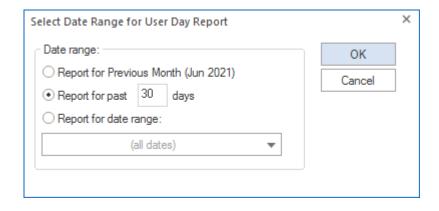
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



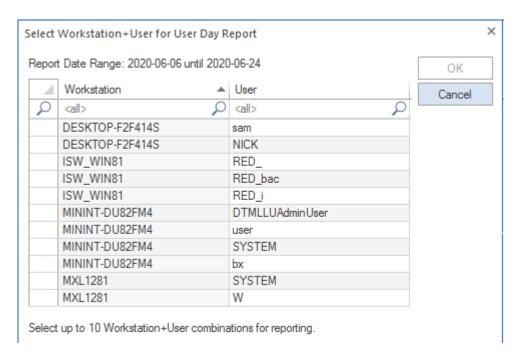
Application Report: User Day

This report will begin by presenting a date range selector:



The maximum report period is 400 days.

Next, a selector is presented with a list of computers + users to include in the report. A maximum of 10 computers + users can be included:



Columns include:

"User, Workstation, Date, Time" (first column)

Start Type (Initial or Continuing),

Application,

Publisher,

Version,

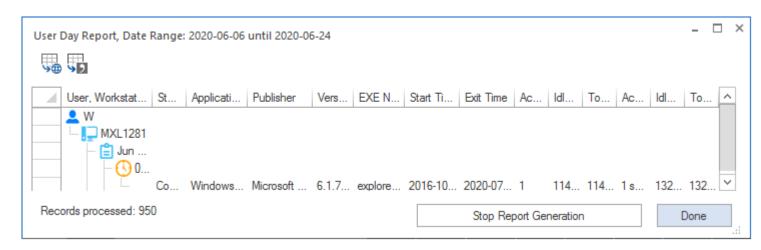
EXE Name,

Start Time.

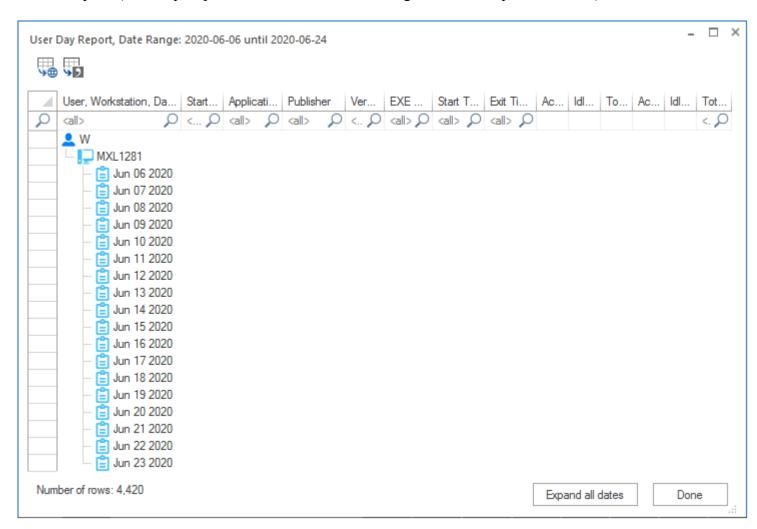
Exit Time (Smart Inventory Imported records will show "via smart inventory"),

Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

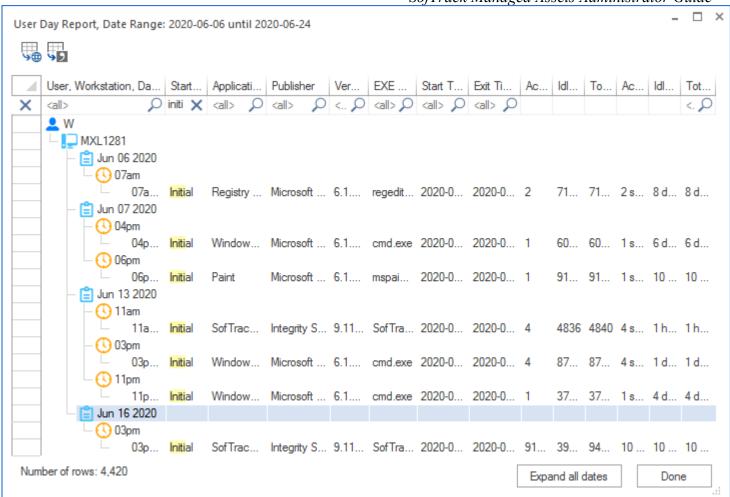
This report is unique in how it is built, image below is while it is being built:



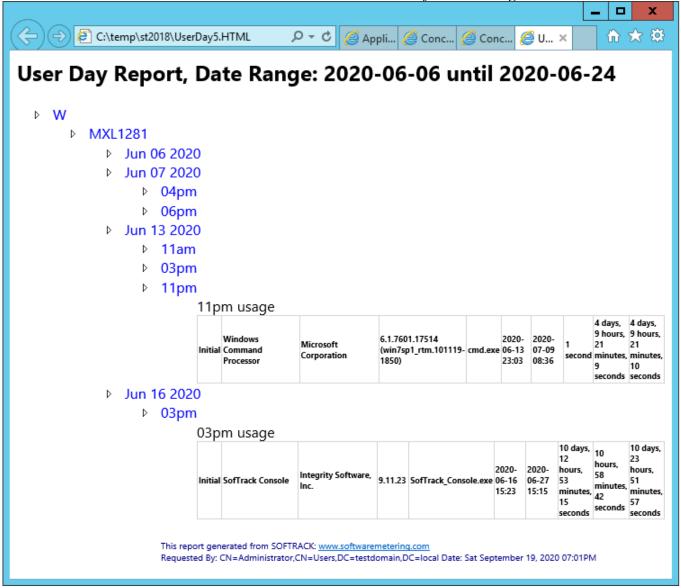
Once complete (the 'Stop Report Generation' button is changed to read 'Expand all dates'):



To open each item, click on its icon, each icon can be clicked to expand or collapse. If you filter any columns (Start Type being filtered below) it will automatically reveal matching rows:



The User Day report can be exported to Html:



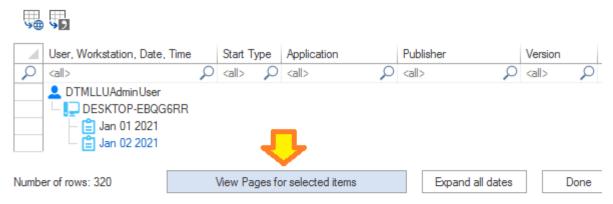
In the images above the user name is "W".

Note: When exporting to Html, only the currently opened rows will be included. To immediately reveal all rows click the button "Expand all dates".

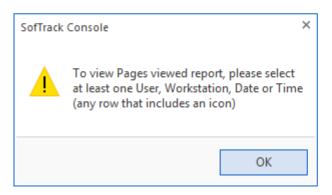
Application Report: User Day + Page Titles

Following the instructions of the previous section an additional ability to reveal the specific details of user activity by observing the Page Title (Caption Bar) of each application interaction is available:

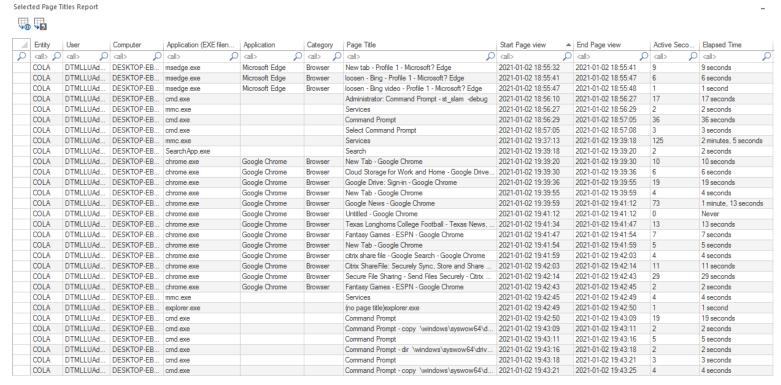
User Day Report, Date Range: 2021-01-01 until 2021-01-05



Select any row with an icon, if you select another row or none you see this



Select each desired item and click the View Pages for selected items button a new window is opened:

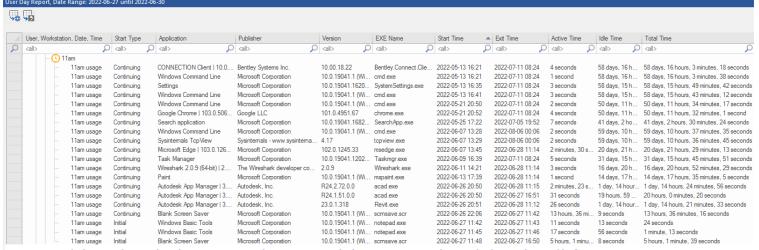


The report (image above) includes the specific start and exit time for each Page Title:

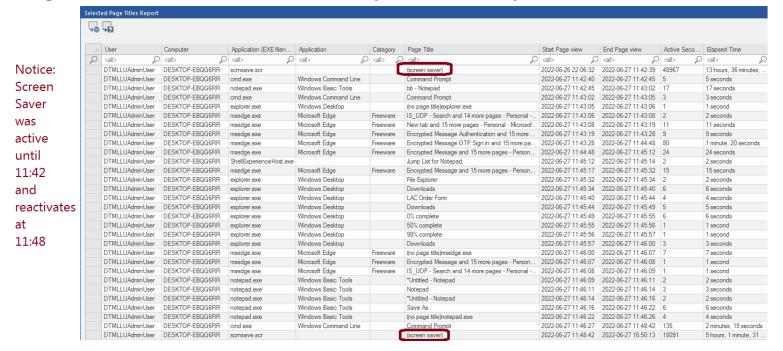
Page Title	Start Page view	•	End Page view	Active Seco	Elapsed Time
<all></all>	<all></all>	Q	<all></all>	<all></all>	<all></all>
New tab - Profile 1 - Microsoft? Edge	2021-01-02 18:55:32		2021-01-02 18:55:41	9	9 seconds
loosen - Bing - Profile 1 - Microsoft? Edge	2021-01-02 18:55:41		2021-01-02 18:55:47	6	6 seconds
loosen - Bing video - Profile 1 - Microsoft? Edge	2021-01-02 18:55:47		2021-01-02 18:55:48	1	1 second
Administrator: Command Prompt - st_slam -debug	2021-01-02 18:56:10		2021-01-02 18:56:27	17	17 seconds
Services	2021-01-02 18:56:27		2021-01-02 18:56:29	2	2 seconds
Command Prompt	2021-01-02 18:56:29		2021-01-02 18:57:05	36	36 seconds
Select Command Prompt	2021-01-02 18:57:05		2021-01-02 18:57:08	3	3 seconds
Services	2021-01-02 19:37:13		2021-01-02 19:39:18	125	2 minutes, 5 seconds
Search	2021-01-02 19:39:18		2021-01-02 19:39:20	2	2 seconds
New Tab - Google Chrome	2021-01-02 19:39:20		2021-01-02 19:39:30	10	10 seconds
Cloud Storage for Work and Home - Google Drive	2021-01-02 19:39:30		2021-01-02 19:39:36	6	6 seconds
Google Drive: Sign-in - Google Chrome	2021-01-02 19:39:36		2021-01-02 19:39:55	19	19 seconds
New Tab - Google Chrome	2021-01-02 19:39:55		2021-01-02 19:39:59	4	4 seconds
Google News - Google Chrome	2021-01-02 19:39:59		2021-01-02 19:41:12	73	1 minute, 13 seconds
Untitled - Google Chrome	2021-01-02 19:41:12		2021-01-02 19:41:12	0	Never
Texas Longhoms College Football - Texas News,	2021-01-02 19:41:34		2021-01-02 19:41:47	13	13 seconds
Fantasy Games - ESPN - Google Chrome	2021-01-02 19:41:47		2021-01-02 19:41:54	7	7 seconds
New Tab - Google Chrome	2021-01-02 19:41:54		2021-01-02 19:41:59	5	5 seconds
citrix share file - Google Search - Google Chrome	2021-01-02 19:41:59		2021-01-02 19:42:03	4	4 seconds
Citrix ShareFile: Securely Sync, Store and Share	2021-01-02 19:42:03		2021-01-02 19:42:14	11	11 seconds
Secure File Sharing - Send Files Securely - Citrix	2021-01-02 19:42:14		2021-01-02 19:42:43	29	29 seconds
Fantasy Games - ESPN - Google Chrome	2021-01-02 19:42:43		2021-01-02 19:42:45	2	2 seconds
Services	2021-01-02 19:42:45		2021-01-02 19:42:49	4	4 seconds

This provides a direct understanding of user actions for each second.

The following is an additional example:

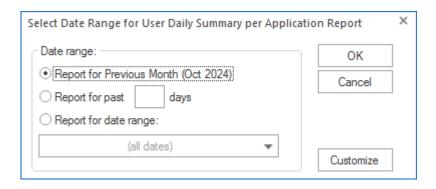


Page Titles view below reveals second-by-second activity detail for 11am - noon



Application Report: User Daily Summary per Application

This report will begin by presenting a date range selector:



The maximum report period is 5000 days.

Columns include:

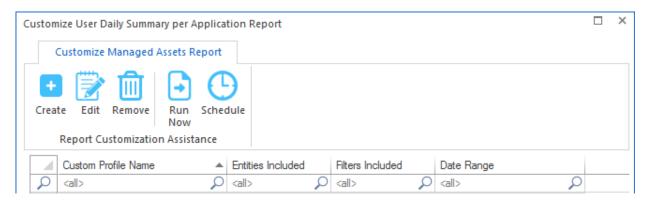
Entity, Workstation, User, Date, EXE Filename, Active Time (seconds), Active Time (minutes), Active Time (hr, min, sec)

The Entity column is only included when reporting from multiple Entities in the same report.

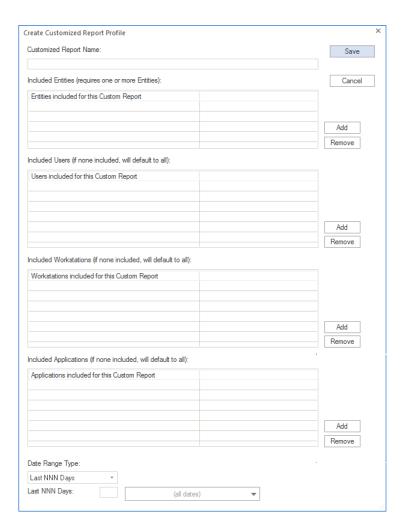
This report shows total active time per EXE Filename on a date within the defined date range.

Application Report: User Daily Summary per Application - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- Applications
- Date Range

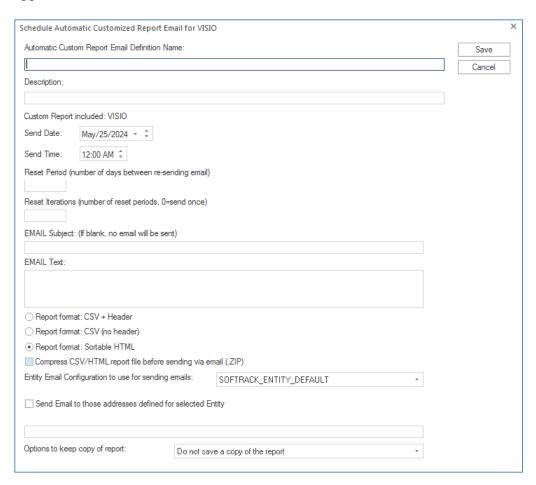
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

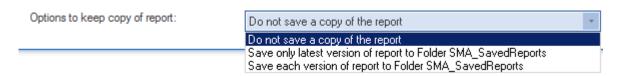
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):

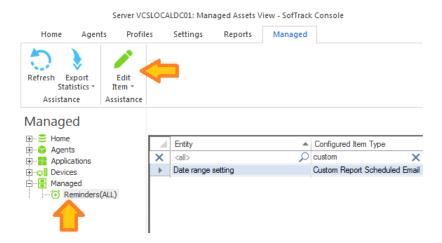


The default is to not save a copy. However, if an option to save is selected, the scheduled activity

can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

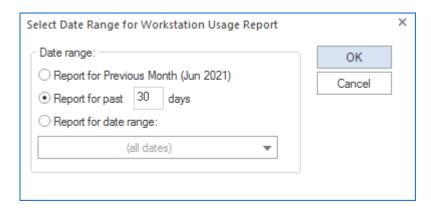
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



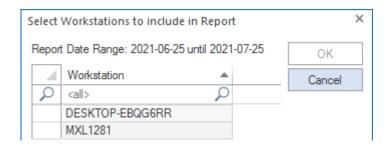
Application Report: Workstation Usage

This report will begin by presenting a date range selector:



The maximum report period is 400 days.

Next, a selector is presented with a list of computers to include in the report. There is no maximum number of computers can be included:



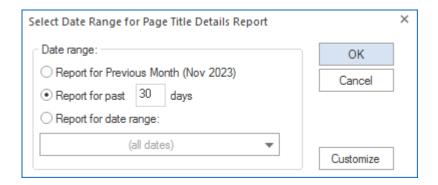
Columns include:

Entity, Workstation, Machine GUID, User, Vendor, Application Name, EXE Filename, EXE Version, EXE Description, EXE Product, Start Time, Exit Time, Active Time (seconds), Idle Time (seconds), Total Time (seconds), Active Time, Idle Time, Total Time

The Entity column is only included when reporting from multiple Entities in the same report.

Application Report: Page Titles (Detail)

This report will begin by presenting a date range selector:



Columns include:

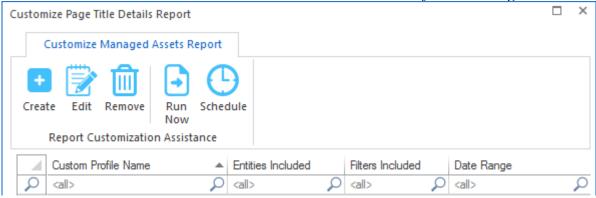
Workstation, User, Page Title, EXE Name, Start Time, Start Hour, Exit Time, Active Time, Active Time (seconds)

The Page Title Detail shown are moment-by-moment details of what the user was viewing. The Start Hour column allows easy filtering and sorting by when the page view was initiated. The Active Time value is the difference between the Start and Exit Times.

Application Report: Page Titles (Detail) - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:

SofTrack Managed Assets Administrator Guide



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations

- Applications
- Date Range

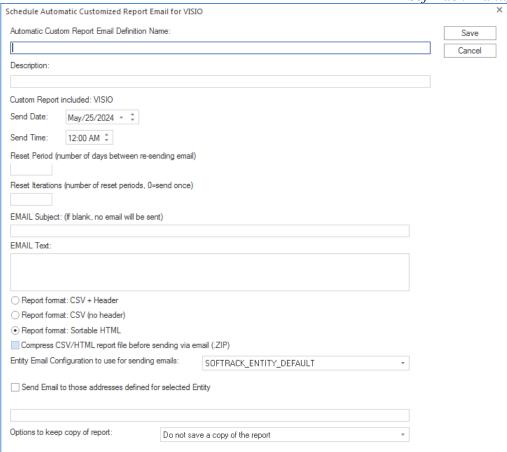
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

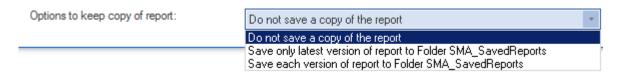
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

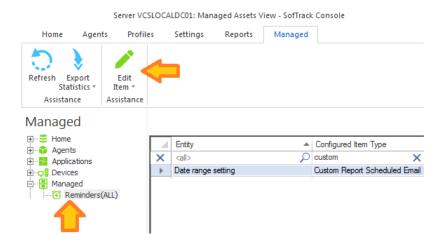
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

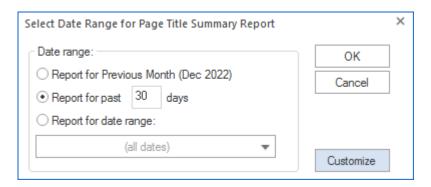
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Page Titles (Summary)

This report will begin by presenting a date range selector:



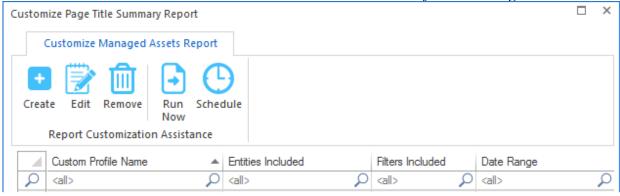
Columns include:

Workstation, User, Page Title, EXE Name, Active Time, Active Time (seconds)

The Page Titles shown are unique per workstation, user and EXE Name combination, being shown once. The Active Time value is the cumulative total Active Time for all times that Page Title appeared while using the indicate EXE Name.

Application Report: Page Titles (Summary) - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

- Entities
- Users
- Workstations

- Applications
- Date Range

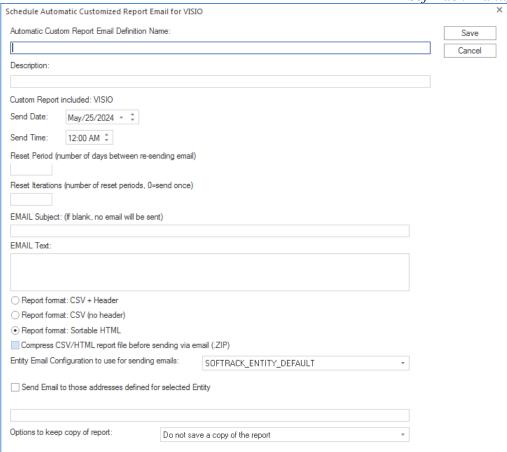
One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Users, Workstations, Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

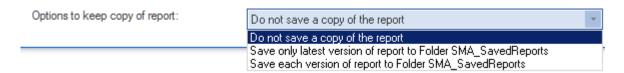
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

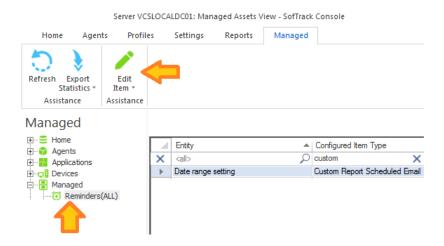
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

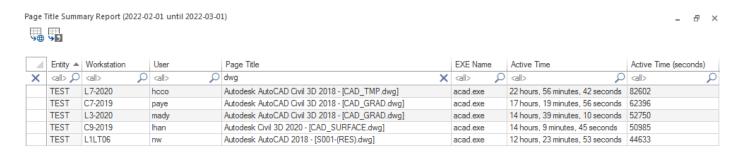
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Page Titles (Summary) - Tracking Document Viewing+Editing Activity

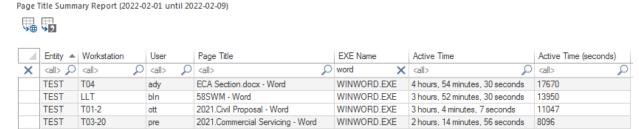
With customizations including pre-filtering, the Page Titles report can be configured for an unlimited number of scheduled reports both emails and locally stored. For example, a weekly report of active time for each AutoCAD® documents viewed and edited:



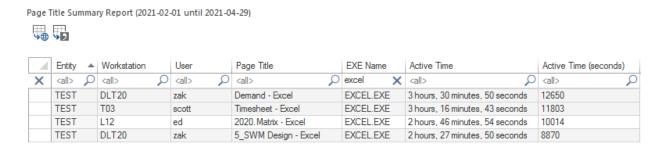
Or active time viewing and editing Revit® documents:



The Page Title report generation applies to all applications used throughout your enterprise, for example, Microsoft® Word®:



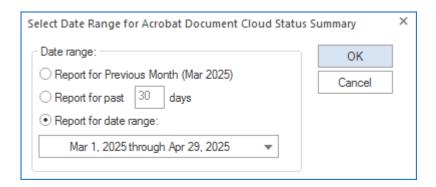
And, Microsoft® Excel®:



With the ability to separately schedule each customized report configuration, these and more Page Title reports can be sent to specific teams throughout your enterprise for all types of purposes, ranging from customer billing, to department accounting to monitoring of user activity and more.

Application Report: Adobe® Acrobat® Document Cloud Current Status Summary

This report will begin by presenting a date range selector:



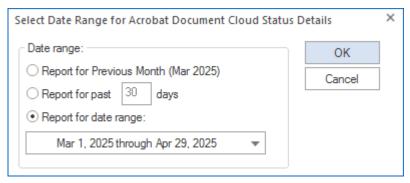
Columns include:

Date recorded, Workstation, Installation Date, Installation Folder, Local User, Email Address, Latest Cloud Logon, Acrobat License, Entitlement, Entitlement Verification, County Code, Latest Edit-Create Usage Time

Will contain a single row per Workstation + Local User combination

Application Report: Adobe® Acrobat® Document Cloud Current Status Details

This report will begin by presenting a date range selector:



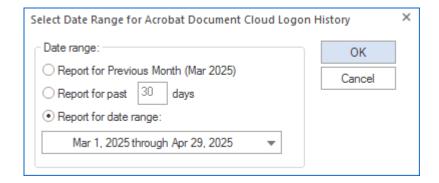
Columns include:

Date recorded, Workstation, Installation Date, Installation Folder, Local User, Email Address, Latest Cloud Logon, Acrobat License, Entitlement, Entitlement Verification, County Code, Latest Edit-Create Usage, Currently Entitled?, Advanced E-Sign User?, Latest Distiller Usage, Latest Edit Tools Usage, Latest Compound Document Usage, Latest PDFMaker Usage Time

Compound Documents: PDFs resulting from the combining or merging of multiple files into a single PDF, including 'Adobe Portfolio' files

Application Report: Adobe® Acrobat® Document Cloud Logon History

This report will begin by presenting a date range selector:

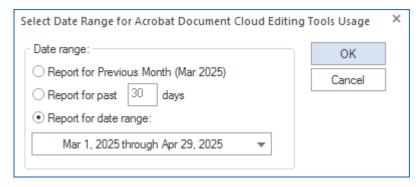


Columns include:

Date recorded, Workstation, Local User, Email Address, Cloud Logon, Acrobat License, Entitlement, Entitlement Verification, County Code, Latest Edit-Create Usage Time

Application Report: Adobe® Acrobat® Document Editing Tools Usage

This report will begin by presenting a date range selector:

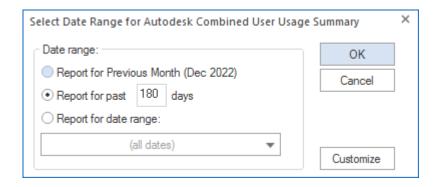


Columns include:

Date recorded, Workstation, Local User, Email Address, Tool Name, Number of Usages, Latest Usage Time

Application Report: Autodesk® Named-User Combined User Usage Summary

This report will begin by presenting a date range selector:

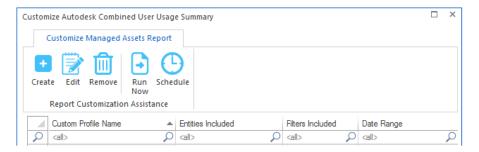


Columns include:

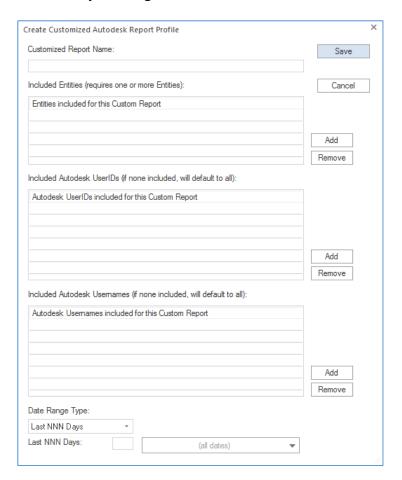
Autodesk User ID, Autodesk User Name, Number Products Opened, Number Times Opened, Number of License Pools Used, Total Time In-Use, Total Idle Time, Number of Usages less than 5 minutes, Total Time In-Use(Seconds), Total Time Idle(Seconds)

Application Report: Autodesk® Named-User Combined User Usage Summary - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



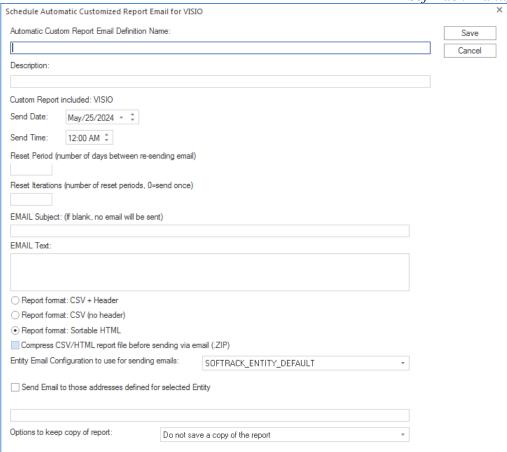
Customizations (pre-filtering) include:

- Entities
- Autodesk® UserIDs
- Autodesk® Usernames
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Autodesk® UserIDs, Autodesk® Usernames) will be determined by the Entities selected.

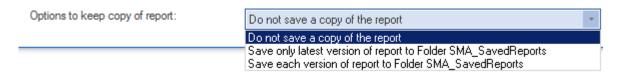
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

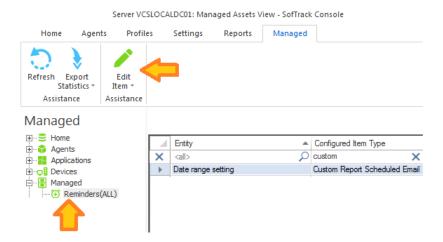
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

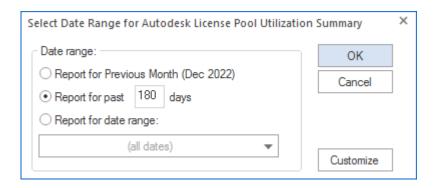
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Autodesk® Named-User License Pool Utilization Summary

This report will begin by presenting a date range selector:



Columns include:

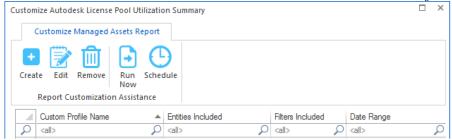
License Pool Expiration Date, Autodesk User ID, Autodesk User Name, Number Products Opened, Number Times Opened, Number of License Pools Used, Total Time In-Use, Number of Usages less than 5 minutes, Total Time In-Use(Seconds)

About Autodesk® Cloud Licenses

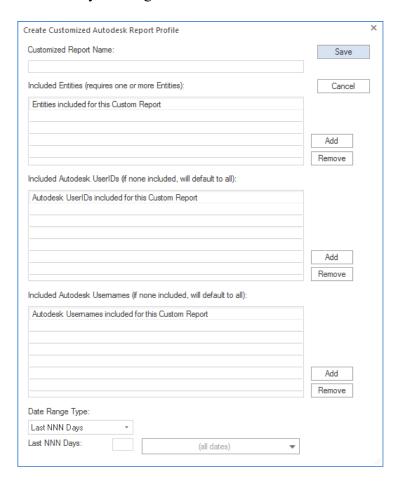
In the above report, the "License Pool Expiration Date" columns will present dates such as 2022-06-07, 2022-11-28, etc. These "License Pool" names are directly provided by Autodesk® and indicate the expiration date of the selected "License Pool". Upon expiration, any unconsumed licenses will no longer be available for use. Please contact Autodesk® for details regarding the number of unconsumed licenses.

Application Report: Autodesk® Named-User License Pool Utilization Summary - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



Customizations (pre-filtering) include:

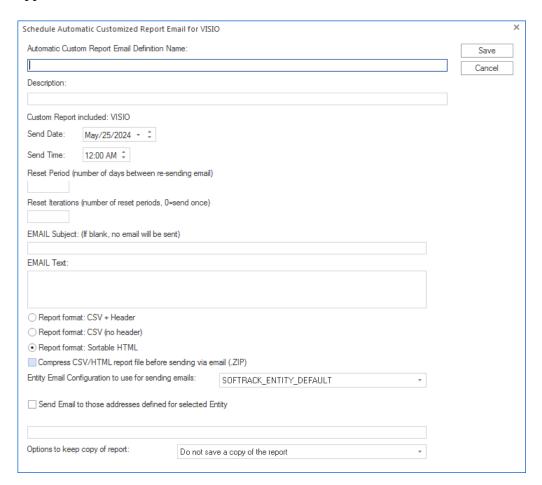
- Entities
- Autodesk® UserIDs
- Autodesk® Usernames
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Autodesk® UserIDs, Autodesk® Usernames) will be determined by the Entities selected.

The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within

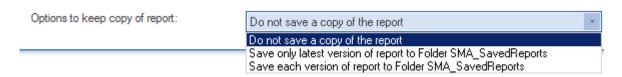
the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

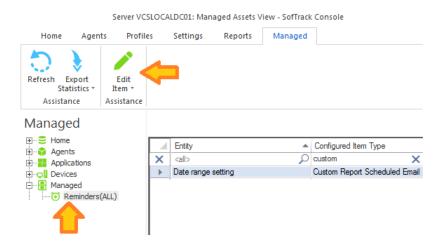
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

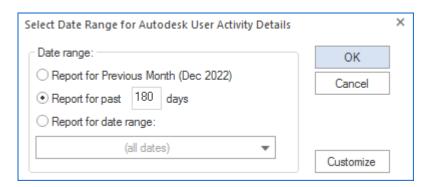
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Autodesk® Named-User Activity Details

This report will begin by presenting a date range selector:

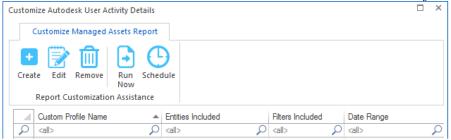


Columns include:

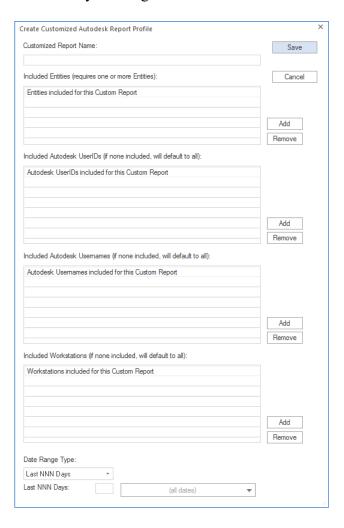
Autodesk User ID, Autodesk User Name, Computer, Local Username, EXEName, EXEVersion, License Name, License Year+Feature, License Pool Expiration Date, Serial Number (Network License), Start Time, Exit Time, Idle Time, Days of Usage, Active Time(Seconds), Idle Time(Seconds)

Application Report: Autodesk® Named-User Activity Details - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



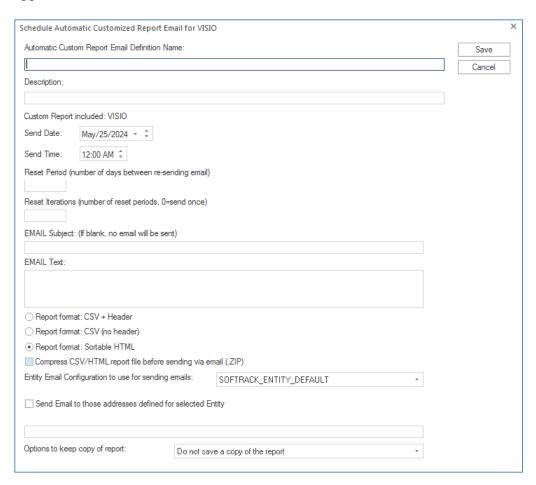
Customizations (pre-filtering) include:

- Entities
- Autodesk® UserIDs
- Autodesk® Usernames
- Workstations
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Autodesk® UserIDs, Autodesk® Usernames, Workstations) will be determined by the Entities selected.

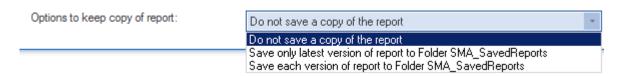
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):

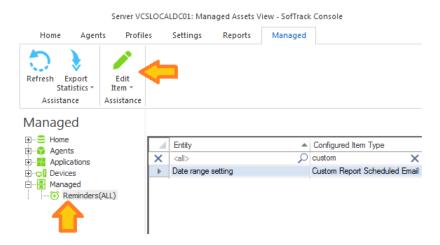


The default is to not save a copy. However, if an option to save is selected, the scheduled activity

can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

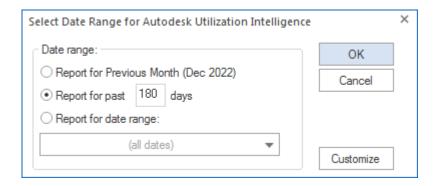
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Autodesk® Utilization Intelligence

This report will begin by presenting a date range selector:



Columns include:

Autodesk User ID, Autodesk User Name, Local Username, License Name, Licenses Used, Versions Used, Number of Usages, Active Time per usage (average), Idle Time per usage (average) in seconds, Idle Time per usage (average) in seconds, Active Time Percentage (%), Idle Time Percentage (%), Most recent usage start time

Note: The Percentage values may not add up to be 100% due to rounding.

Sample result (single HTML, simple to share as needed):

Autodesk Utilization Intelligence for COLA (2022-06-01 until 2022-09-12)

Autodesk User ID	Autodesk Username \$	Local Username	License Name	License(s) Used	Version(s) Used	#Usages	Active Time per Usage (Average)	Idle Time per Usage (Average) \$	Active Time per Usage (Average) (seconds)	Idle Time per Usage (Average) (seconds)	% Active Time	% Idle Time \$	Most Recent Start \$
6M3AQPM323LQ	stevetravis	s.travis	Civil 3D	FLEX#2	2022	1	2 minutes, 52 seconds	7 minutes, 8 seconds	172	428	28	71	2022-06-06 19:54:35
6M3AQPM323LR	bobjohnson	bob.johnson	Civil 3D	FLEX#2,FLEX#1	2022	6	2 minutes, 30 seconds	11 hours, 33 minutes, 12 seconds	150	41592	0	99	2022-08-29 15:47:36
6M3AQPM323LR	bobjohnson	bob.johnson	Revit	FLEX#1	2021	1	1 minute, 26 seconds	1 minute, 16 seconds	86	76	53	46	2022-08-29 09:04:36
6M3AQPM323LR	bobjohnson	bob.johnson	AutoCAD	FLEX#2,FLEX#1	2021,2023	7	1 minute, 33 seconds	13 hours, 32 minutes, 46 seconds	93	48766	0	99	2022-08-31 16:08:46
6M3AQPM323LR	bobjohnson	bob.johnson	Revit LT	TRL#2	2023	1	2 seconds	2 hours, 13 minutes, 15 seconds	2	7995	0	99	2022-06-06 17:19:29
6M3AQPM323LR	bobjohnson	bob.johnson	AutoCAD LT	RTL#2,TRL#2	2019,2021,2023	9	59 seconds	19 minutes, 58 seconds	59	1198	4	95	2022-09-07 17:38:40

First Prev Showing 1 - 6 / 6 filtered records | 6 records total Next Last // Page: 1 v

You may use the following operators to filter results:

!= not equal

!== not equal value or not equal type

> greater than

Reset All Filters

< less than

>= greater than or equal to

<= less than or equal to

About Autodesk® Cloud Licenses

In the above image, the "Licenses Used" column includes values such as "FLEX#2", "RTL#2", "TRL#2", "RTL#2". These indicated the specific license type utilized. There is another value not shown, it has a value in the format "", "456-9900214",". "FLEX" indicates Flex licenses (licenses that are typically pre-purchased and consumed per-day at a rate based upon the exact Autodesk® product utilized. "456-9900214" indicates an Autodesk® Network (Multi-User) License. The actual value will indicate the Autodesk® serial number utilized. "EDU" indicates an educational license. "TRL" indicates an Autodesk® Free Trial license. "RTL" indicates an Autodesk® Single-User Subscription license.

Application Report: Autodesk® Utilization Intelligence – User Counts per product (filtering example)

When viewing the Autodesk® Utilization Intelligence report, use filtering to isolate specific Autodesk® applications to quickly reveal the number of unique users:

Autodesk Utilization Intelligence for COLA (2022-06-01 until 2022-09-12)

Autodesk User ID \$	Autodesk Username \$	Local Username	License Name		Version(s) Used	#Usages	Active Time per Usage (Average)	Idle Time per Usage (Average)	Active Time per Usage (Average) (seconds)	Idle Time per Usage (Average) (seconds)	% Active Time	% Idle Time \$	Most Recent Start Time
			civil 3d										
6M3AQPM323LQ	stevetravis	s. travis	Civil 3D	FLEX#2	2022	1	2 minutes, 52 seconds	7 minutes, 8 seconds	172	428	28	71	2022-06-06 19:54:35
6M3AQPM323LR	bobjohnson	bob.johnson	Civil 3D	FLEX#2,FLEX#1	2022	6	2 minutes, 30 seconds	11 hours, 33 minutes, 12 seconds	150	41592	0	99	2022-08-29 15:47:36
First Prev Show	wing 1 - 2 / 2 fi	■ Use the	Filter Ba	ar to isolate	// Page: 1 ve specific Au que number		•		period				

You may use the following operators to filter results:

| = not equal |
| == not equal value or not equal type
| > greater than
| < less than |
| = greater than or equal to |
| = less than or equal to |
| and | and |
| to range |

Reset All Filters

This report generated from SOFTRACK: www.softwaremetering.com

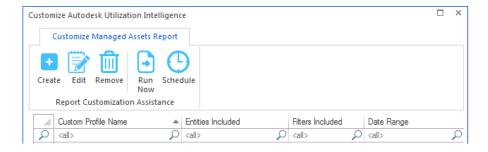
The example above filters the results by "civil 3d" to quickly reveal all users of Civil 3D during the reporting period. The results can be used to determine each user's level of product engagement via active time vs idle time, average usage time and most recent start date/time.

The resulting report can help identify occasional users of any Autodesk® product.

The results shown above are contained within a single HTML file, enabling sharing as needed.

Application Report: Autodesk® Utilization Intelligence - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



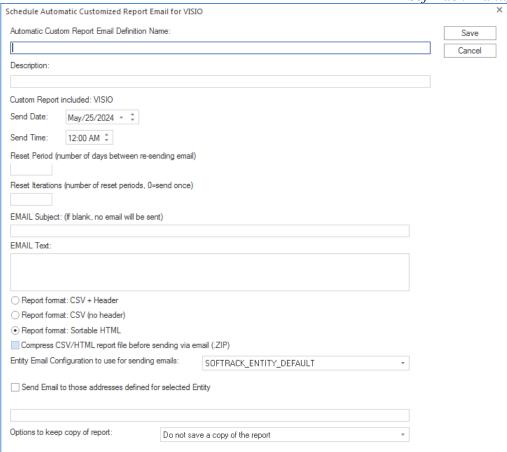
Customizations (pre-filtering) include:

- Entities
- Autodesk® UserIDs
- Autodesk® Usernames
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Autodesk® UserIDs, Autodesk® Usernames) will be determined by the Entities selected.

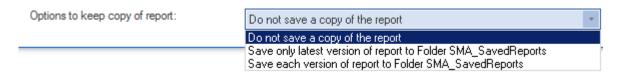
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

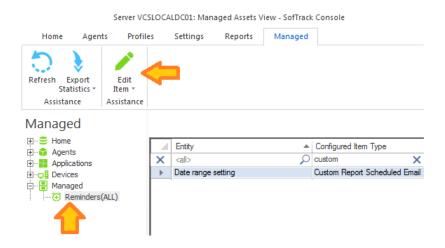
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

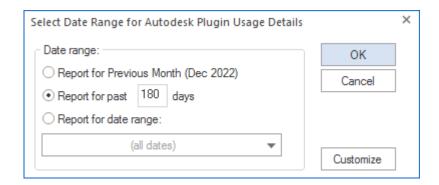
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Autodesk® Plugin Utilization

This report will begin by presenting a date range selector:



Columns include:

Computer, Local Username, EXE Name, EXE Version, Usage Start Time, Plugin Filename, Plugin Description, Plugin Version, Plugin Company, Plugin Installation Date, Plugin Path Size

SofTrack tracks all AutoCAD Plugins, .arx, .dll (.net) and LISP based plugins (.fas, .vlx, .mnl, .lsp, etc.).

Application Report: Autodesk® Plugin Utilization - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



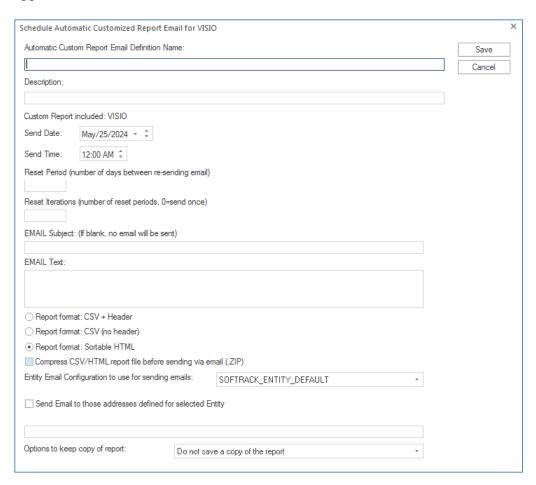
Customizations (pre-filtering) include:

- Entities
- Local Usernames (i.e. Logon name at each workstation)
- Workstations
- Autodesk® Plugins/Addins
- Date Range

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Local Usernames, Workstations, Autodesk® Plugins/Addins) will be determined by the Entities selected.

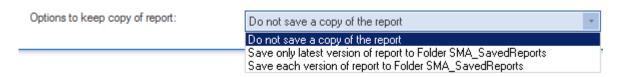
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):

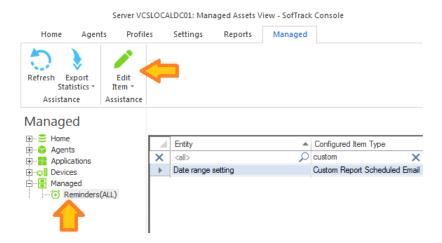


The default is to not save a copy. However, if an option to save is selected, the scheduled activity

can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

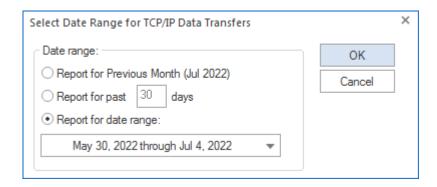
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



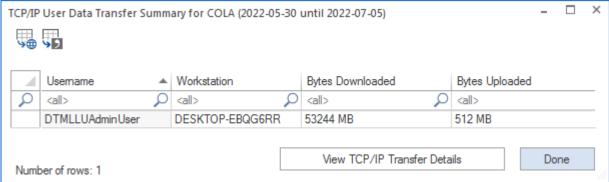
Application Report: TCP/IP Data Transfers Summary and Details

This report will begin by presenting a date range selector:

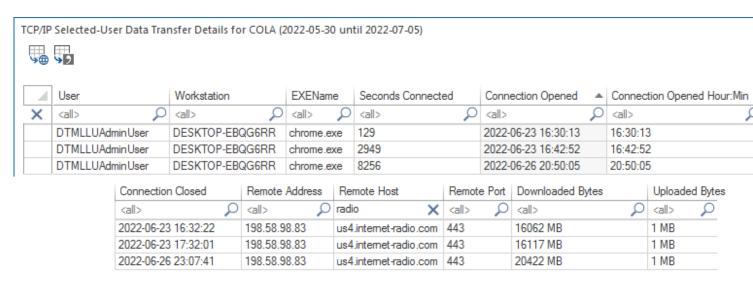


The initial report is a summary:

SofTrack Managed Assets Administrator Guide



Select one or more rows and click the "View TCP/IP Transfer Details" button:



IMPORTANT NOTE:

This report only includes TCP/IP activity when more than 100,000 bytes were uploaded or downloaded.

Columns include:

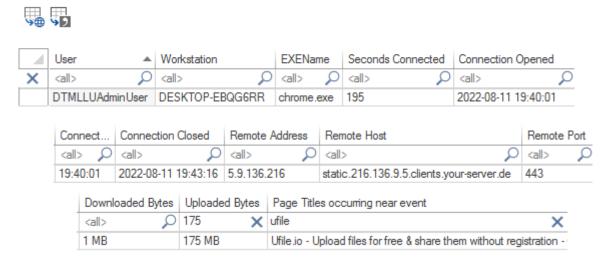
User, Workstation, EXEName, Seconds Connected, Connection Opened Time, Connection Opened Hour:Minute:Second, Connection Closed, Remote Address, Remote Host, Remote Port, Downloaded Bytes, Uploaded Bytes, Page Titles Occurring near event

The Connection Opened Time Hour:Minute:Second column is useful when sorting or filtering, it allows time-of-day sorting to find activity occurring during specific times such as after hours.

The final column is special, because the process responsible for the TCP/IP activity does not usually have its own window. All modern browsers use a centralized process to handle all TCP/IP activity. Thus, the final column, Page Titles Occurring near event was created. The EXEName in the sample above (chrome.exe) is used to help identify what the user may have been doing at the time of the TCP/IP activity.

For example:

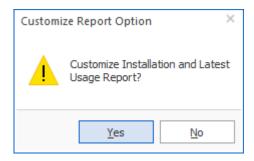
TCP/IP Selected-User Data Transfer Details for COLA (2022-07-16 until 2022-08-14)



Notice, one of the Page Titles occurring at the same time as the 175MB upload was UFILE.IO, a free file sharing website.

Application Report: Installation and Latest Usage Report

This report does not use a date range selector. This report, when selected, will first present a Customize prompt:



If Yes is clicked, the Customize window appears, otherwise, the report is immediately run.

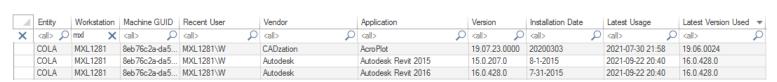
Report columns include:

Entity, Workstation, MachineGUID, Recent User, Vendor, Application, Version, Installation Date, Latest Usage (if known), Latest Version Used (if known)

The Entity column is only included when reporting from multiple Entities in the same report.

Sample report:





This report was modified in December 2023 to detect any version of each installed application that has been used, previously this report was strictly based on the version shown but that was too restrictive as some applications are frequently updated and can have multiple versions used resulting in an incomplete view of activity. The main goal is to show if the installed application has had usage regardless of version.

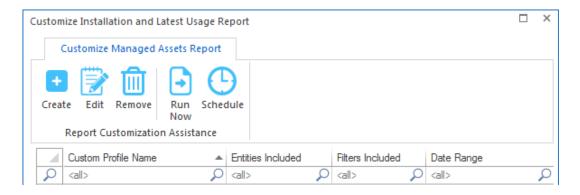
The Latest Version Used column is based on the date of the most recent usage. It does not include the actual "latest" version that could have been used (i.e. might show version 16 when version 17 is installed, but, based on the date of most recent usage, it was version 16 that was being used).

In the above image, Autodesk Revit 2015 and Autodesk Revit 2016 are both installed, the latest usage is based on "Autodesk Revit" usage regardless of the "version". The <u>Idle versus Active</u> <u>Report</u> (detail or summary) will review the specific version(s) being used.

This report combines a query of workstation inventory and application usage to provide a more complete review than simple inventory results. This combination provides an additional benefit of presenting applications that are not installed to be identified and latest usage detailed.

Application Report: Installation and Latest Usage Report - Customization

This report includes the ability to be customized (pre-filtering). When **Yes** is clicked in response to the Customize prompt the following appears:



Continue by clicking the Create ribbon button and the following appears:

	<i>j</i>	
reate Customized Report Profile		
Customized Report Name:		Save
Included Entities (requires one or more Entities):		Cancel
Entities included for this Custom Report		
		Add
		Remove
Included Workstations (if none included, will default to all):		
Workstations included for this Custom Report		
		Add
		Remove
Included Applications (if none included, will default to all): Applications included for this Custom Report	Rule	OR
		AND
		NOT
		Add
		Add

Customizations (pre-filtering) include:

- Entities
- Workstations
- Applications + Software Categories
- OR, AND, NOT rules for each included Application

One or more Entities must be selected, the other pre-filtering items are optional. However, available items (i.e. Workstations and Applications) will be determined by the Entities selected.

Special note regarding Included Applications:

When adding Application(s) to be included in the report, the list of Applications provided to select from contains both the Application name determined by workstation inventory review of Installed Applications and the 'EXE Description' value contained within each EXE file that has been launched. It is possible that a specific EXE usage is not associated with an installed Application, however, most every EXE will have an 'EXE Description' value. Therefore to provide the most complete review, during the process of creating the report, the Applications selected does include matching on both the Application Name and EXE Description. The resulting report may include a 'blank' value for the Application Name, for those rows, the EXE Description column will have the matching value.

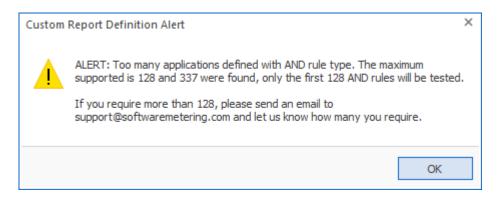
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

Application Report: Installation and Latest Usage Report – Customization Rules

This report provides further customization via rules. When an application is added it will default to the OR rule type - meaning this application (or Software Category) will be included if present given the other conditions of Entities and Workstations specified.

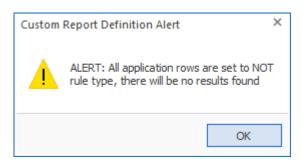
To change the rule for an application or set of selected applications, click the OR, AND or NOT button.

The AND rule type means the specific application/category MUST be present for a specific workstation to be included or potentially included in the in the resulting report. There is a maximum of 128 application/category rows that can be set to the AND rule type. If more than 128 are defined, when the custom report is saved, a popup will occur:

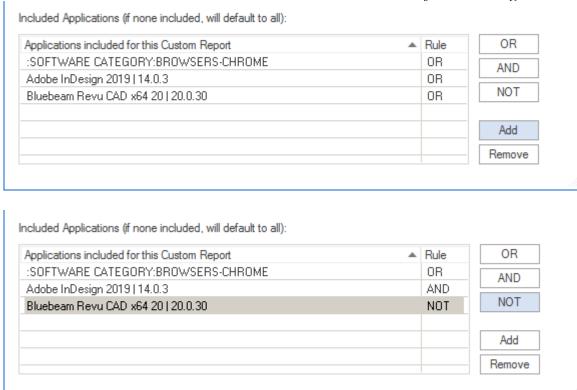


The NOT rule type means the specific application/category MUST NOT be present for a specific workstation to be included or potentially included in the resulting report.

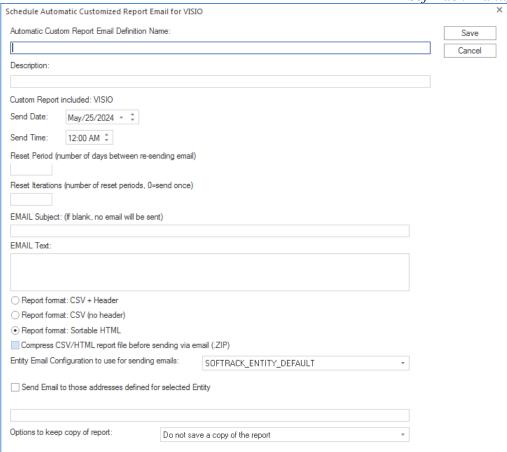
If all included applications/categories are set to the NOT rule type no results will occur. When the custom report is defined that only specifies the NOT rule type a popup will occur:



The following are sample variations of rule definitions:

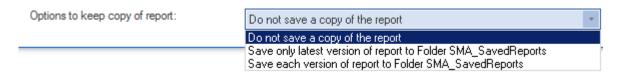


Once saved, the custom report can be scheduled to be automatically run by the SofTrack Server Agent. To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

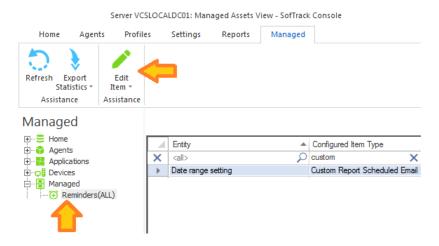
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

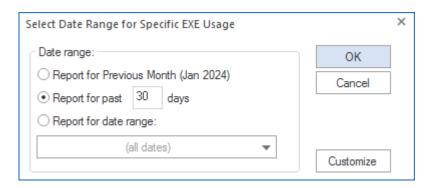
You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:

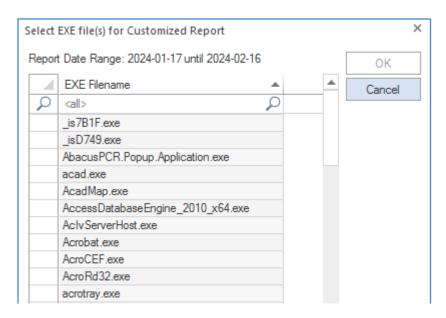


Application Report: Specific EXE Usage

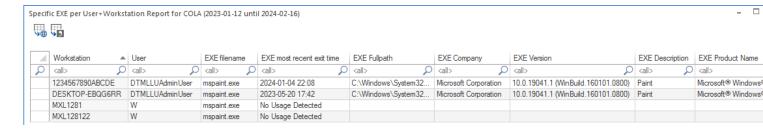
This report will begin by presenting a date range selector:



Once the date range is selected, click OK and the next prompt will request the specific EXE file(s) to include in the report:



Once one or more EXE file(s) are selected, click OK and the report will be produced. Sample:



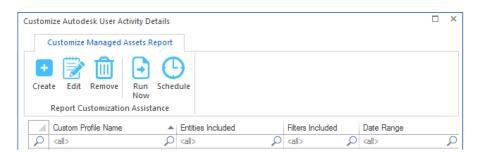
Columns include:

Workstation, User, EXE filename, EXE most recent exit time, EXE Fullpath, EXE Company, EXE Version, EXE Description, EXE Product Name

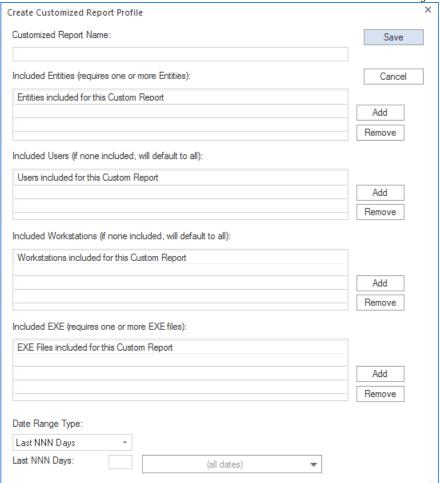
The report is organized to identify each unique combination of Workstation + User that used the specified EXE. The exit time of the most recent usage indicates the latest time the EXE was being used. The EXE file details (Fullpath, Company, Version, Description, Product) are based on the most recent usage. It is possible that other usages of the specified EXE occurred using different file details, however, this report only reveals the most recent usage and EXE details from that usage.

Application Report: Specific EXE Usage - Customization

This report includes the ability to be customized (pre-filtering). When Customize button is clicked the following appears:



Continue by clicking the Create ribbon button and the following appears:



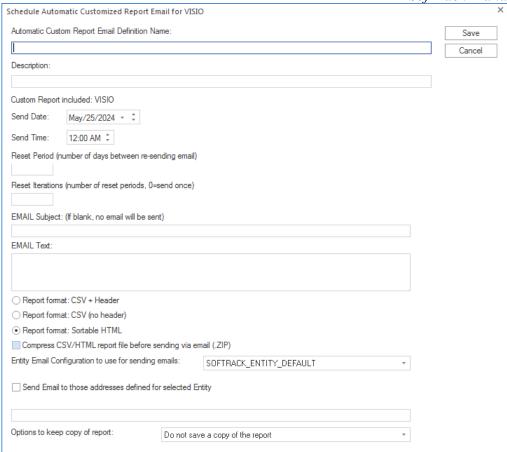
Customizations (pre-filtering) include:

- Entities
- Users
- Workstations
- EXE Files
- Date Range

One or more Entities must be selected and one or more EXE file(s) must be selected. The other pre-filtering items are optional. However, available items (i.e. Users, Workstations) will be determined by the Entities selected.

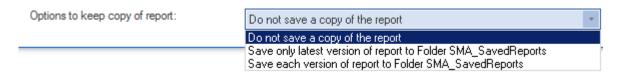
The customized report is saved with a unique name (that you specify) and can be scheduled to automatically run and email results and, if desired, save the latest version or each version of the report (by including the report run date in the filename) to the SMA_SavedReports folder within the STLOG path.

To Schedule, select a saved customized report and click the ribbon button and the following will appear:



The above is creating a schedule for the customized report named "VISIO" (as shown in the window caption bar). When you specify the *Automatic Custom Report Email Definition Name* realize that name will be used as the basis for the filename of the resulting report. The Report format can be CSV+Column Header, CSV without header or Sortable HTML. Additionally, the output file can optionally be compressed to .ZIP format to reduce the email attachment size.

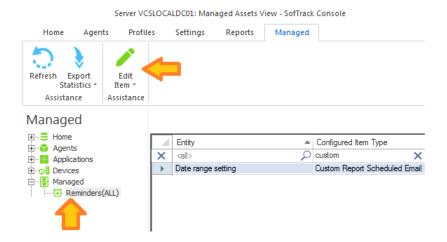
Additionally, the report can be configured to save a permanent file in the STLOG\SMA SavedReports folder (located at the SofTrack Server Agent Host):



The default is to not save a copy. However, if an option to save is selected, the scheduled activity can be configured to only save to the STLOG\SMA_SavedReports folder and to not send an email. To set this ability, completely erase the Email Subject.

You can create multiple schedules with different selections including different email addresses and output types.

Once a Schedule is created, it can be viewed and edited in the Managed section within the Reminders(ALL) selection:



Application Report: Versions Report

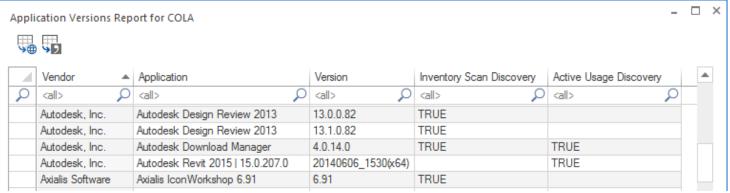
This report does not use a date range selector.

Columns include:

Entity, Vendor, Application, Version, Inventory Scan Discovery, Active Usage Discovery

The Entity column is only included when reporting from multiple Entities in the same report.

Sample report:



Application Report: Installation Keys

This report does not use a date range selector.

Columns include:

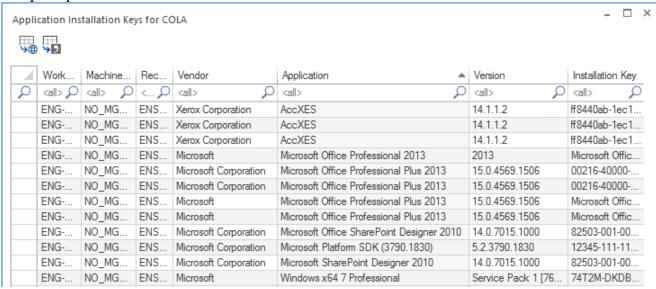
Entity, Workstation, Machine GUID, Recent User, Vendor, Application, Version, Installation Key

The Entity column is only included when reporting from multiple Entities in the same report.

This report will provide details of each Windows® Operating System installation key, any

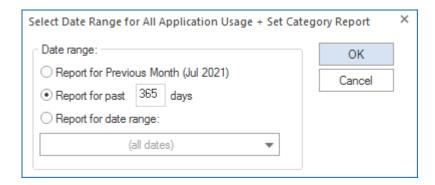
applications where the Installation Key has been detected and all Microsoft® installation keys (for example, Office applications).

Sample report:



Application Report: All Application Usage + Set Category

This report will begin by presenting a date range selector:

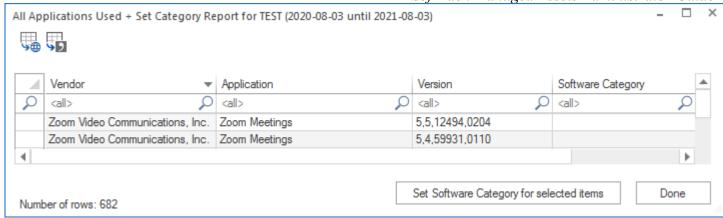


Columns include:

Entity, Vendor, Application, Version, Software Category

The Entity column is only included when reporting from multiple Entities in the same report.

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To set the Software Category, select applications to set and click the button Set Software Category for selecte items. A new window will appear to select or define a new Software Category and to apply to the selected applications.

This report enables setting of Software Category for any application used, not only those that show as being installed. For instance, Microsoft "Paint" does not show as being installed but is an application that can be used.



Application Report: Vendors

This report does not use a date range selector.

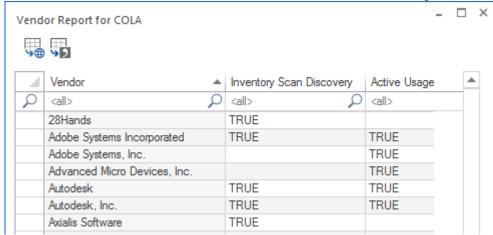
Columns include:

Entity, Vendor, Inventory Scan Discover, Active Usage Discovery

The Entity column is only included when reporting from multiple Entities in the same report.

This report provides a list of all Application Vendors discovered.

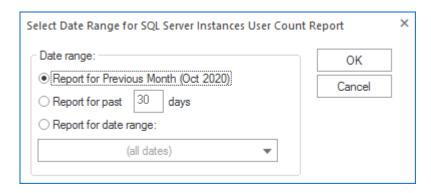
Sample report:



Application Report: Summary+Detail Unique Users per SQL Instance

For any workstation or server using the SofTrack STSLAM Agent that includes at least one active SQL Server Instance will automatically receive SQL Server Reports.

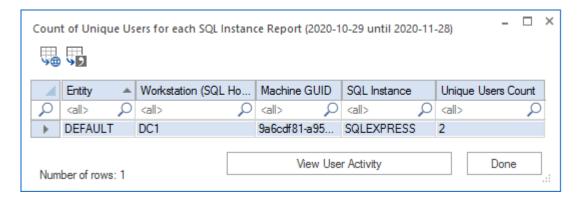
This report uses a date range selector:



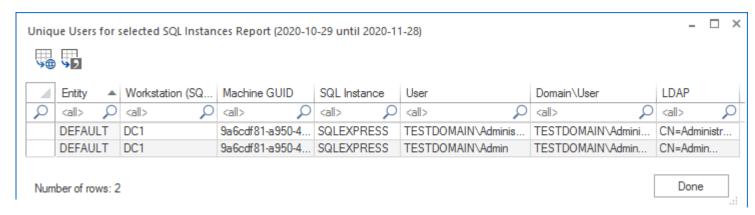
Columns include:

Entity, SQL Host (Computer), Machine GUID, SQL Instance, Count of Unique Users

The report has one row per SQL Instance with any usage during the reporting period:



Click the 'View User Activity' button to reveal the list of unique users for selected rows:

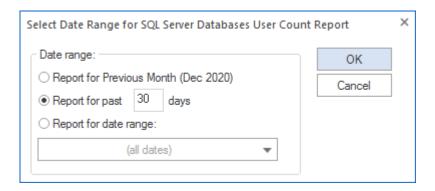


The report includes Logon name used (User column), Domain\User, and, if available, LDAP name.

Application Report: Summary+Detail Unique Users per SQL Database

For any workstation or server using the SofTrack STSLAM Agent that includes at least one active SQL Server Instance will automatically receive SQL Server Reports.

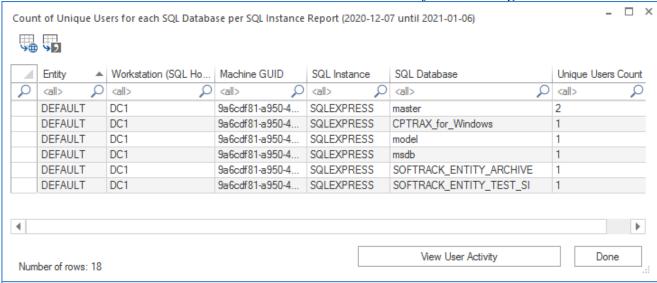
This report uses a date range selector:



Columns include:

Entity, SQL Host (Computer), Machine GUID, SQL Instance, SQL Database, Count of Unique Users

The report has one row per SQL Instance+Database with any usage during the reporting period:



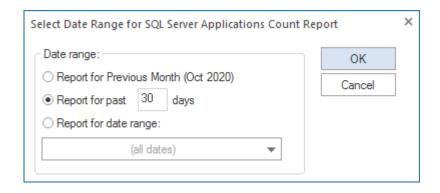
Click the 'View User Activity' button to reveal the list of unique users for selected rows:

The report includes Logon name used (User column), Domain\User, and, if available, LDAP name.

Application Report: Summary+Detail Unique Applications per SQL Database

For any workstation or server using the SofTrack STSLAM Agent that includes at least one active SQL Server Instance will automatically receive SQL Server Reports.

This report uses a date range selector:

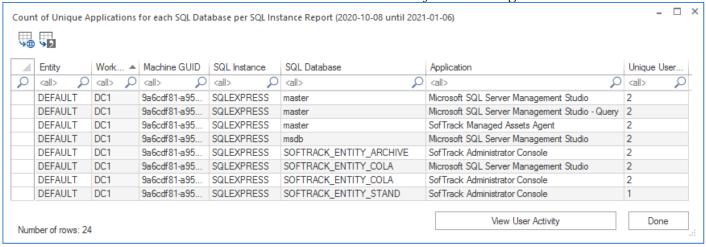


Columns include:

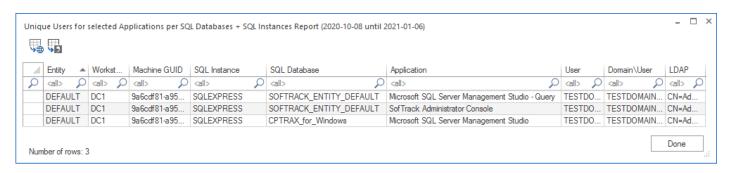
Entity, SQL Host (Computer), Machine GUID, SQL Instance, SQL Database Application, Count of Unique Users

The report has one row per SQL Instance+Database+Application with any usage during the reporting period:

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Click the 'View User Activity' button to reveal the list of unique users for selected rows:



The report includes Logon name used (User column), Domain\User, and, if available, LDAP name.

Device Report: Workstation Status

This report does not use a date range selector.

Columns include:

Entity, Workstation, Machine GUID, Last Reboot, Wake Up Type, Last Inventory Update, Recent User, Terminal Server Licenses, Manufacturer, Model, BIOS, Serial Number, Windows OS, Service Pack, Release, Installation Key, is Genuine, Experience Score, IPV4, MAC, MAC, MAC

The Entity column is only included when reporting from multiple Entities in the same report.

The (3) MAC columns show the first 3 MAC Addresses for the workstation (MAC=Media Access Control, unique 6 byte address).

Device Report: Workstation CPU

This report does not use a date range selector.

Columns include:

Entity, Workstation, Machine GUID, Terminal Server Licenses, Manufacturer, Model, BIOS, Serial Number, Number of CPUs, CPU 0 Vendor, CPU 0 Type, CPU 0 Speed,<....> CPU 15 Vendor, CPU 15 Type, CPU 15 Speed

The Entity column is only included when reporting from multiple Entities in the same report.

This report will show the first 16 CPUs detected per workstation.

Device Report: Workstation Disk Space

This report does not use a date range selector.

Columns include:

Entity, Workstation, Machine GUID, Recent User, C: Drive Size, C: Drive Free, Volume 1 Letter, Volume 1 Name, Volume 1 Format, Volume 1 Size, Volume 1 Free, <...>, Volume 5 Letter, Volume 5 Name, Volume 5 Format, Volume 5 Size, Volume 5 Free

The Entity column is only included when reporting from multiple Entities in the same report.

This report will show the first 5 Volumes detected per workstation.

Device Report: Workstation Operating Systems

This report does not use a date range selector.

Columns include:

Entity, Workstation, Machine GUID, Terminal Server Licenses, Windows OS+Build, Service Pack, Build, Release, Installation Key, is Genuine, Experience Score

The Entity column is only included when reporting from multiple Entities in the same report.

Device Report: Workstation Windows Updates + Installation Status

This report does not use a date range selector. Only updates that occurred in the past 6 months are maintained.

Columns include:

Entity, Workstation, Date installed (local time at the workstation), KB (knowledge base article number), Operation, Status, Description

The Entity column is only included when reporting from multiple Entities in the same report.

Device Report: Workstation Microsoft Cloud Joined

This report does not use a date range selector.

Columns include:

Entity, TenantID, DeviceID, UserEmail

The Entity column is only included when reporting from multiple Entities in the same report.

Device Report: Workstation Microsoft Cloud Joined + User Details

This report does not use a date range selector.

Columns include:

Entity, TenantID, DeviceID, UserPrincipalName, When Created, Usage Location, Physical Delivery Ofc, Street Address, City, State, Postal Code, Country, EmployeeID, Department, Telephone, Mobile

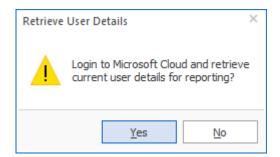
Notes:

All values after DeviceID are obtained by an interactive query of your Azure (EntraID) Tenant. Column *When Created* = When the user object was created Column *Mobile* = Cell Phone

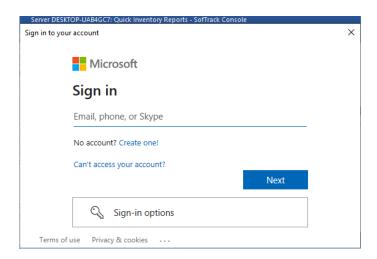
The Entity column is only included when reporting from multiple Entities in the same report.

When selected this report will begin an interactive query of your Azure (EntraID) Tenant.

When the report is started a prompt will appear:



If Yes is clicked the following Login Prompt is presented (login details are only sent to Azure(EntraID), the details are not obtained or used by SofTrack)



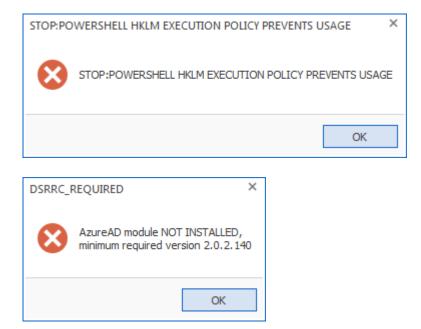
Once the details are entered, SofTrack automatically runs a PowerShell script to obtain the user details for the Tenant that was logged into. These details are stored for reporting in the <u>STLOG</u> <u>path</u> at the SofTrack Server Host, in a file with a filename matching the format:

```
CLOUD TENANT 65977bcb- * {tenant id}.CSV
```

If your organization has multiple Azure(EntraID) Tenants, run this report multiple times using a logon for each and the user details for each Tenant will be saved to the STLOG path and the report will automatically use the results from all Tenants provided.

You do not need to re-fetch all Tenant User details (via PowerShell) each time the report is accessed, only if there have been changes such as new user account or changes in details. The CLOUD_TENANT_*.CSV files will be referenced whenever PowerShell details are not refetched.

If there are issues with PowerShell or Azure PowerShell Module installation the following errors can occur and prevent the gathering of user details for this report:



Resolution for the above errors are provided in the following 2 sections:

Device Report: Setting PowerShell Execution Policy

To ensure the Workstation Microsoft Cloud Joined + User Details Report can gather user details, it is important to set the PowerShell Execution Policy to RemoteSigned or Unrestricted or Bypass. The default PowerShell Execution Policy on Windows® servers is RemoteSigned.

To verify and change the Policy, open a PowerShell session As Administrator on the workstation where SofTrack Console will be utilized and enter the command:

Get-ExecutionPolicy -List

```
Select Administrator: Command Prompt - powershell
C:\temp>powershell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
PS C:\temp> Get-ExecutionPolicy -List
        Scope ExecutionPolicy
MachinePolicy
                    Undefined
   UserPolicy
                    Undefined
                    Undefined
      Process
                    Undefined
  CurrentUser
 LocalMachine
                 Unrestricted
```

To SET the policy for any user on the workstation use the PowerShell command:

Set-ExecutionPolicy -ExecutionPolicy RemoteSigned

```
Administrator: Windows PowerShell

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Windows\system32> Set-ExecutionPolicy -ExecutionPolicy RemoteSigned

Execution Policy Change
The execution policy helps protect you from scripts that you do not trust. Changing the execution policy might expose you to the security risks described in the about_Execution_Policies help topic at https://go.microsoft.com/fwlink/?LinkID=135170. Do you want to change the execution policy?

[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "N"): Y
```

And to ensure a local user policy is not conflicting use the PowerShell command:

```
Set-ExecutionPolicy -ExecutionPolicy Undefined -Scope CurrentUser
```

To SET the policy for the current user on the workstation use the PowerShell command:

Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope CurrentUser

If the PowerShell Excecution Policy is not configured as indicated the following message will appear when attempting to gather user details:



Device Report: Installation of PowerShell Module: AzureAd

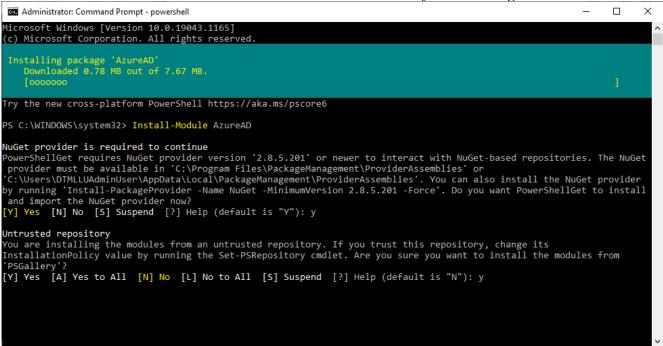
To begin, open a PowerShell session As Administrator on the workstation where SofTrack Console will be utilized and enter the command At the PowerShell prompt enter the command

Install-Module AzureAD

Sample:

If any prompts regarding "Do you want to install...", answer Yes:

The installation continues:



If any prompts concerning "Untrusted repository" occur, answer Yes to continue. It is noted that Microsoft® defaults its repositories to untrusted, with additional effort not documented here, that can be changed. But, for purposes of setting up PowerShell for use by the SofTrack Console it is not required.

If a previous version of the AzureAD module is installed you may need to add the following to successfully complete the installation:

Install-Module AzureAD -Force -AllowClobber

Device Report: Workstation Timezones

This report does not use a date range selector.

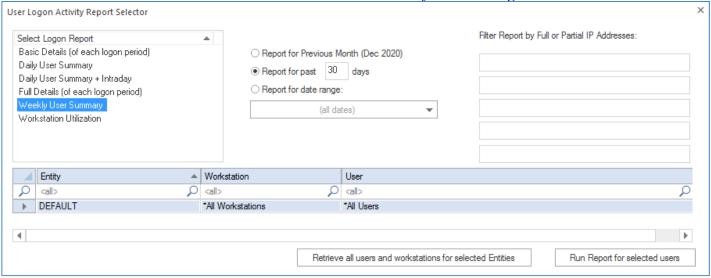
Columns include:

Entity, Workstation, Machine GUID, Recent User, Timezone

The Entity column is only included when reporting from multiple Entities in the same report.

Device Report: User Logon Report Selector

This report selection presents a report selector:



There are (6) Logon Reports available:

- Basic Details (of each logon period)
- Full Details (of each logon period)
- Daily User Summary
- Daily User Summary + Intraday
- Weekly User Summary
- Workstation Utilization

Once the report type is selected, choose the report date range.

To further refine the resulting report up to 5 different IP addresses can be entered to filter upon. Enter the full (i.e. "198.2.1.32") IPv4 address or a partial (i.e. "10.10.") address to match upon. This is useful for several reports that do not include the IPv4 address as a filterable report column.

The final section allows selection of the specific users to include in the selected report.

Initially, there will be a single row for each selected Entity. If selected it will include "*All Workstations" and "*All Users". To further refine the selection click the "Retrieve all users and workstations for selected Entities" button. That initial row for "*All Users" and "*All Workstations" will be removed and the list will be populated with all users and workstations from that entity. And, all values shown in the list will automatically be selected.

The list of user and workstations is based upon the actual data contained within the ALL_LOGON_ACTIVITY table for the selected entity. This list includes all DISTINCT variations, thus it is possible a user and/or workstation can appear multiple times in the list in different combinations.

To include all rows click the "triangle" at the upper left corner of the grid, that will "select all" in the list. To make other selections use "shift+click" on each desired row and/or use the "filter box" at the tope of each columns to filter the list and then select as required.

Once all desired selections are made click the "Run Report for selected users" button and the report will be created.

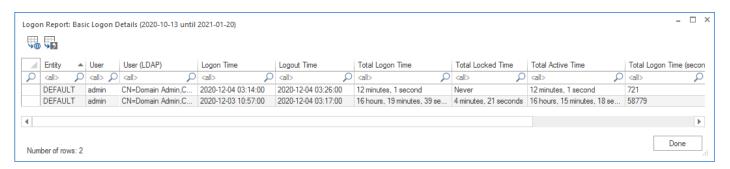
Note: You can create several reports without closing the "User Logon Activity Report Selector" screen. When complete, click the [X] at the upper right corner of the selector screen.

The following sections futher detail each Logon Report.

Logon Report: Basic Details (of each logon period)

The Basic Details report provides the following columns:

Entity, User, User(LDAP), Logon Time, Logout Time, Total Logon Time, Total Locked Time, Total Active Time, Total Logon Time (seconds), Total Locked Time (seconds), Total Active Time (seconds):



The last 3 columns are duplicated to provide output in "seconds only" format when exporting to CSV to ease use of mathematical formulas, for instance, if the CSV file is opened in Excel or other spreadsheet application.

At the upper left corner of the report there are two icons, the first exports to HTML the other exports to CSV.

Sample HTML export:

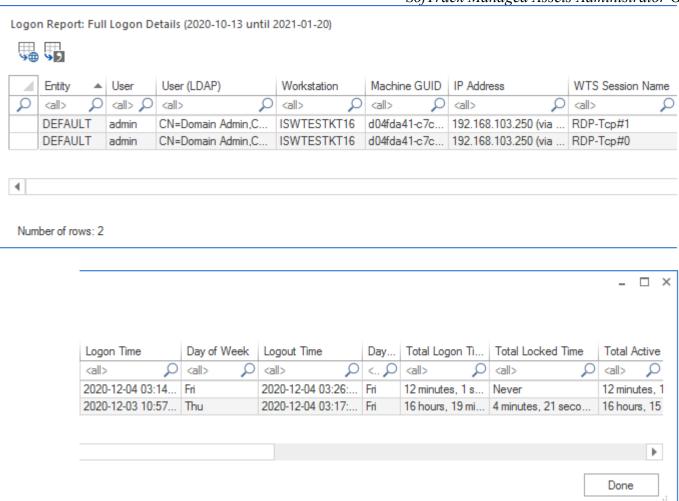
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Entity	User	User (LDAP)	Logon Time \$	Logout Time \$	Total Logon Time	† Total	Total Active Time \$	Total Logon Time (seconds) \$	Total Locked Time (seconds) \$	Total Active Time (seconds)
DEFAULT	admin	CN=Domain Admin,CN=Users,DC=kttest,DC=local	2020-12-04 03:14:00	2020-12-04 03:26:00	12 minutes, 1 second	Never	12 minutes, 1 second	721	0	721
DEFAULT	admin	CN=Domain Admin,CN=Users,DC=kttest,DC=local	2020-12-03 10:57:00	2020-12-04 03:17:00	16 hours, 19 minutes, 39	4 minutes, 21 seconds	16 hours, 15 minutes, 18	58779	261	58518
25 rows Reset A	All Filters			Next Last	seconds // Page: 1 🗸		seconds			
Reset A ou may no no gree less gree gree gree gree gree	use the ot equal value than ss than eater than ss than or	following operators to filter re		Next Last			seconds			

Logon Report: Full Details (of each logon period)

The Full Details report provides the following columns:

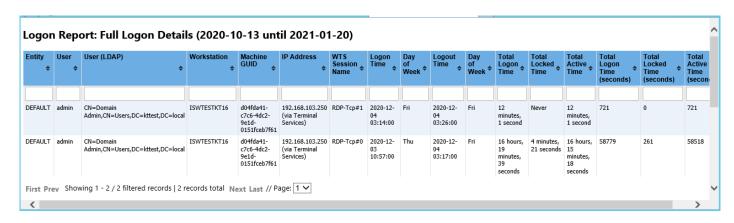
Entity, User, User(LDAP), Workstation, Machine GUID, IP Address, WTS Session Name, Logon Time, Day of Week, Logout Time, Day of Week, Total Logon Time, Total Locked Time, Total Active Time, Total Logon Time (seconds), Total Locked Time (seconds), Total Active Time (seconds). The sample image has been split to provide an enlarged view:



The last 3 columns are duplicated to provide output in "seconds only" format when exporting to CSV to ease use of mathematical formulas, for instance, if the CSV file is opened in Excel or other spreadsheet application.

At the upper left corner of the report there are two icons, the first exports to HTML the other exports to CSV.

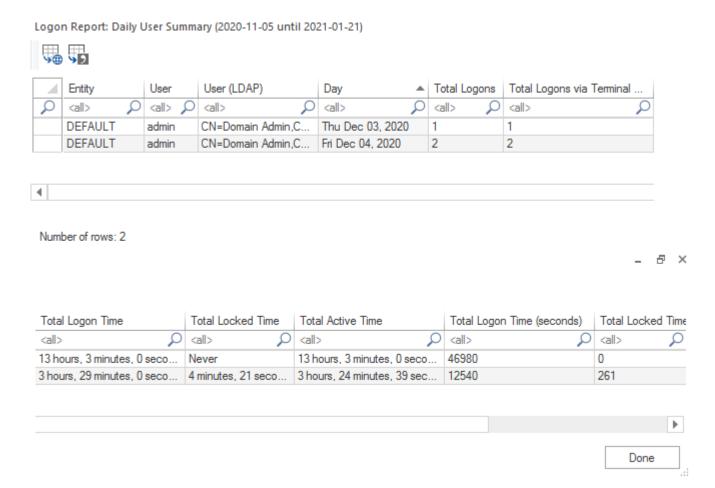
Sample HTML export:



Logon Report: Daily User Summary

The Daily User Summary report provides the following columns:

Entity, User, User(LDAP), Day, Total Logons, Total Logons via Terminal Services, Total Logon Time, Total Locked Time, Total Locked Time, Total Logon Time (seconds), Total Locked Time (seconds), Total Active Time (seconds). The sample image has been split to provide an enlarged view:



The "Total Logons via Terminal Services" indicates logons that occurred within a terminal server session (including Citrix sessions). Virtual Desktop logons will not be tracked via Terminal Services, instead Virtual Desktop logons are tallied in the "Total Logons" column. The "Total Logons" column indicates the number of separate logons that occurred during the day including when the logon started on a previous date but continued into another day.

The "Total Locked Time" column indicates the total amount of time the user desktop was locked. However, if a Logon session spans multiple days, the Total Locked Time is only attributed to the final date of the logon. This can cause the final day of a logon even to have a negative active time if the locked time exceeds the time logged on that final day of a logon session that spans multiple days. This occurs because the total locked time is a single value per logon session. The "Daily User Summary + Intraday" (next report detailed) provides a different perspective that details each locked period per day.

The last 3 columns are duplicated to provide output in "seconds only" format when exporting to CSV to ease use of mathematical formulas, for instance, if the CSV file is opened in Excel or other spreadsheet application.

At the upper left corner of the report there are two icons, the first exports to HTML the other exports to CSV.

Sample HTML export:

	Logon Report: Dail	v User Summarv	(2020-11-05 unti	2021-01-21)
1	Logon Reports Dan	y osci saiiiiiai y	(LOLO II OS AIIG	

Entity	User ♦	User (LDAP)	Day ♦	Total Logons	Total Logons via Terminal Services	Total Logon Time \$	Total Locked Time \$	Total Active Time \$	Total Logon Time \$ (seconds)	Total Locked Time \$ (seconds)	Total Active Time 4 (seconds)
DEFAULT	admin	CN=Domain Admin,CN=Users,DC=kttest,DC=local	Thu Dec 03, 2020	1	1	13 hours, 3 minutes, 0 seconds	Never	13 hours, 3 minutes, 0 seconds	46980	0	46980
DEFAULT	admin	CN=Domain Admin,CN=Users,DC=kttest,DC=local	Fri Dec 04, 2020	2	2	3 hours, 29 minutes, 0 seconds	4 minutes, 21 seconds	3 hours, 24 minutes, 39 seconds	12540	261	12279

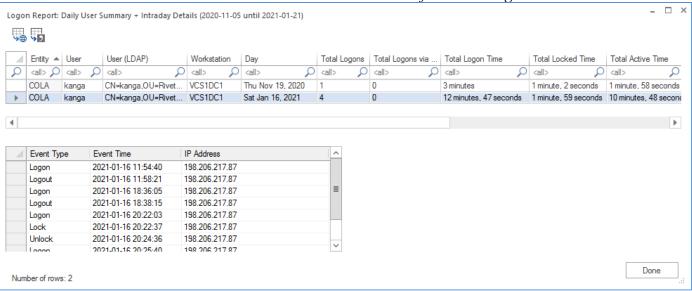
Logon Report: Daily User Summary + Intraday

The Daily User Summary + Intraday report provides the following columns:

Entity, User, User(LDAP), Workstation, Day, Total Logons, Total Logons via Terminal Services, Total Logon Time, Total Locked Time, Total Active Time, Total Logon Time (seconds), Total Locked Time (seconds), Total Active Time (seconds).

And when a row is selected, there is a second view that details the logon, logout, lock and unlock activity that occurred.

SofTrack Managed Assets Administrator Guide



The "Total Logons via Terminal Services" indicates logons that occurred within a terminal server session (including Citrix sessions). Virtual Desktop logons will not be tracked via Terminal Services, instead Virtual Desktop logons are tallied in the "Total Logons" column. The "Total Logons" column indicates the number of separate logons that occurred during the day including when the logon started on a previous date but continued into another day.

The "Total Locked Time" column indicates the total amount of time the user desktop was locked. However, if a Logon session spans multiple days, the Total Locked Time is only attributed to the final date of the logon. This can cause the final day of a logon even to have a negative active time if the locked time exceeds the time logged on that final day of a logon session that spans multiple days. This occurs because the total locked time is a single value per logon session. Click on a row to view the specific logon, logout, lock and unlock for that user's actions on the date represented by that row.

The last 3 columns are duplicated to provide output in "seconds only" format when exporting to CSV to ease use of mathematical formulas, for instance, if the CSV file is opened in Excel or other spreadsheet application.

At the upper left corner of the report there are two icons, the first exports to HTML the other exports to CSV. The HTML report will *only include selected rows* from the main report grid. If no rows are selected there will be no report.

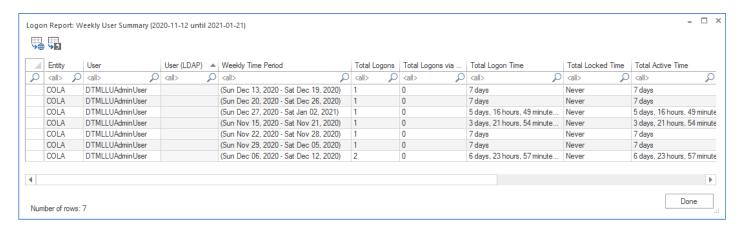
Sample HTML export:

SofTrack Logon Summary and Daily Details Report										
User: Activity										
kanga	Event Type	Event Time	IP Address							
3	Logon	2021-01-16 11:54:40	198.206.217.87							
Date:	Logoff	2021-01-16 11:58:21	198.206.217.87							
Sat Jan 16, 2021	Logon	2021-01-16 18:36:05	198.206.217.87							
	Logoff	2021-01-16 18:38:15	198.206.217.87							
Workstation:	Logon	2021-01-16 20:22:03	198.206.217.87							
VCS1DC1	Lock	2021-01-16 20:22:37	198.206.217.87							
	Unlock	2021-01-16 20:24:36	198.206.217.87							
Total Active Time:	Logon	2021-01-16 20:25:40	198.206.217.87							
10 minutes, 48 seconds	Logoff	2021-01-16 20:25:42	198.206.217.87	~						

Logon Report: Weekly User Summary

The Weekly User Summary report provides the following columns:

Entity, User, User(LDAP), Weekly Time Period, Total Logons, Total Logons via Terminal Services, Total Logon Time, Total Locked Time, Total Active Time, Total Logon Time (seconds), Total Locked Time (seconds).



This report does not include Workstation because it is a summary of all logons for the selected user for a specific week regardless of Workstation.

The "Total Logons via Terminal Services" indicates logons that occurred within a terminal server session (including Citrix sessions). Virtual Desktop logons will not be tracked via Terminal Services, instead Virtual Desktop logons are tallied in the "Total Logons" column. The "Total Logons" column indicates the number of separate logons that occurred during the weekk including when the logon started during a previous week but continued into the next week.

The "Total Locked Time" column indicates the total amount of time the user desktop was locked. However, if a Logon session spans multiple weeks, the Total Locked Time is only attributed to the final week of the logon. This can cause the final week of a logon even to have a negative active time if the locked time exceeds the time logged on during the final week of a logon session that spans multiple weeks. This occurs because the total locked time is a single value per logon session. The "Daily User Summary + Intraday" (previous report detailed) provides a different

perspective that details each locked period per day.

The last 3 columns are duplicated to provide output in "seconds only" format when exporting to CSV to ease use of mathematical formulas, for instance, if the CSV file is opened in Excel or other spreadsheet application.

At the upper left corner of the report there are two icons, the first exports to HTML the other exports to CSV.

Sample HTML export:

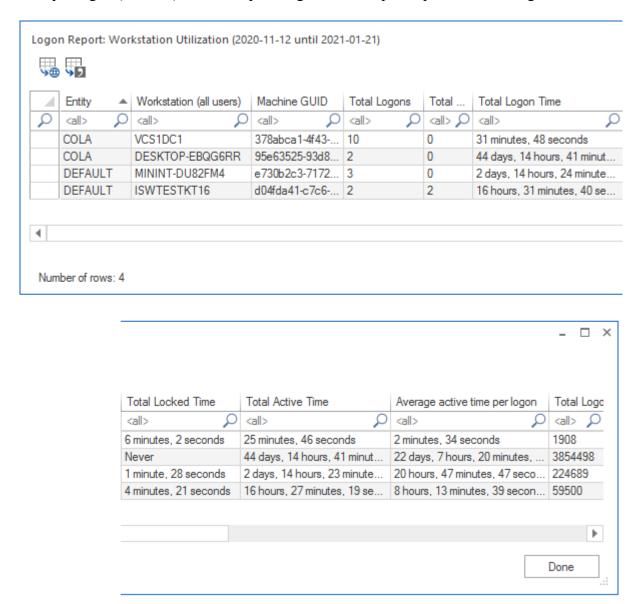
Entity	User ≑	User (LDAP)	Weekly Time Period \$	Total Logons	Total Logons via \$ Terminal Services	Total Logon Time \$	Total Locked Time \$	Total Active Time \$	Total Logon Time \$ (seconds)	Total Locked Time \$ (seconds)	Total Active Time \$ (seconds)
COLA	DTMLLUAdminUser		(Sun Dec 13, 2020 - Sat Dec 19, 2020)	1	0	7 days	Never	7 days	604800	0	604800
COLA	DTMLLUAdminUser		(Sun Dec 20, 2020 - Sat Dec 26, 2020)	1	0	7 days	Never	7 days	604800	0	604800
COLA	DTMLLUAdminUser		(Sun Dec 27, 2020 - Sat Jan 02, 2021)	1	0	5 days, 16 hours, 49 minutes, 44 seconds	Never	5 days, 16 hours, 49 minutes, 44 seconds	492584	0	492584
COLA	DTMLLUAdminUser		(Sun Nov 15, 2020 - Sat Nov 21, 2020)	1	0	3 days, 21 hours, 54 minutes, 22 seconds	Never	3 days, 21 hours, 54 minutes, 22 seconds	338062	0	338062
COLA	DTMLLUAdminUser		(Sun Nov 22, 2020 - Sat Nov 28, 2020)	1	0	7 days	Never	7 days	604800	0	604800
COLA	DTMLLUAdminUser		(Sun Nov 29, 2020 - Sat Dec 05, 2020)	1	0	7 days	Never	7 days	604800	0	604800
COLA	DTMLLUAdminUser		(Sun Dec 06, 2020 - Sat Dec 12, 2020)	2	0	6 days, 23 hours, 57 minutes, 32 seconds	Never	6 days, 23 hours, 57 minutes, 32 seconds	604652	0	604652

Logon Report: Workstation Utilization

The Workstation Utilization report provides the following columns:

Entity, Workstation, Machine GUID, Total Logons, Total Logons via Terminal Services, Total Logon Time, Total Locked Time, Total Active Time, Average active time per logon, Total Logon Time (seconds), Total Locked Time (seconds), Total Active Time (seconds) and Average active

time per logon (seconds). The sample image has been split to provide an enlarged view:

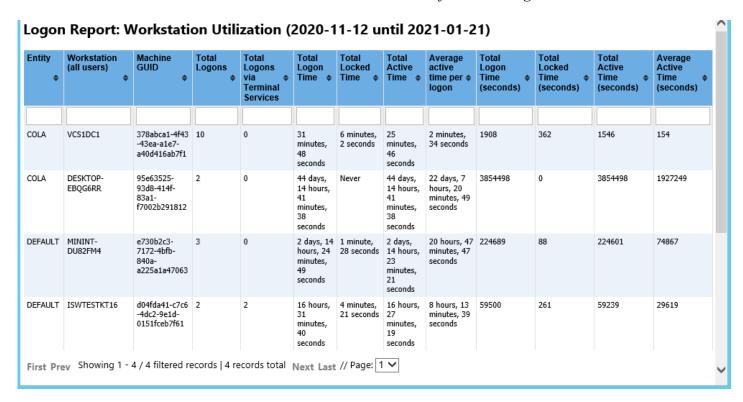


The "Total Logons via Terminal Services" indicates logons that occurred within a terminal server session (including Citrix sessions). Virtual Desktop logons will not be tracked via Terminal Services, instead Virtual Desktop logons are tallied in the "Total Logons" column. The "Total Logons" column indicates the number of separate logons that occurred during the reporting period including when the logon started at a previous time but continued through part of all of the reporting time period.

The last 4 columns are duplicated to provide output in "seconds only" format when exporting to CSV to ease use of mathematical formulas, for instance, if the CSV file is opened in Excel or other spreadsheet application.

At the upper left corner of the report there are two icons, the first exports to HTML the other exports to CSV.

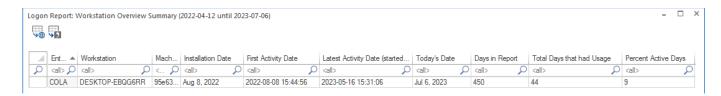
Sample HTML export:



Logon Report: Workstation Overview Summary

The Workstation Overview Summary report provides the following columns:

Entity, Workstation, Machine GUID, Installation Date, First Activity Date (during the reporting range), Latest Activity Date (of activity occurring during the reporting range), Today's Date (date report was run), Days in Report, Total Days that had Usage (Active Days), Percent Active Days

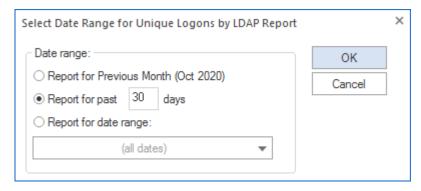


Device Report: Summary+Detail Unique Users [LDAP Logon Names only]

For any workstation or server using the SofTrack STSLAM Agent, Logon Activity will be gathered.

The SPLA (Service Provider License Agreement) User Logon Reports provide Subscriber Access License (SAL) reports to assist Managed Service Providers with user logon reports.

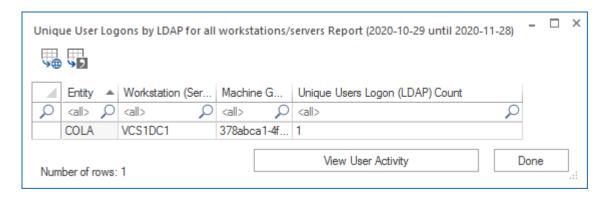
This report uses a date range selector:



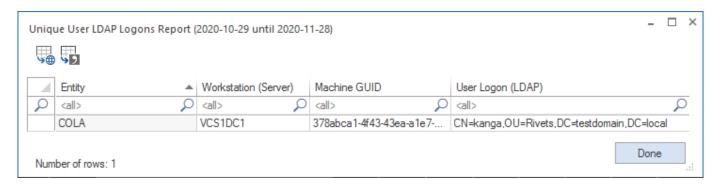
Columns include:

Entity, Workstation/Server, Machine GUID, Count of Unique Users

The report has one row per Workstation/Server with any usage during the reporting period:



Click the 'View User Activity' button to reveal the list of unique users (only those with an LDAP logon value) for selected rows:

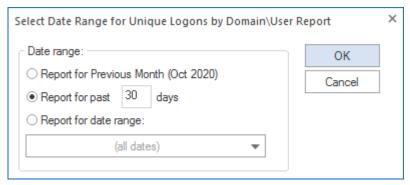


Device Report: Summary+Detail Unique Users [Domain Logon Names only]

For any workstation or server using the SofTrack STSLAM Agent, Logon Activity will be gathered.

The SPLA (Service Provider License Agreement) User Logon Reports provide Subscriber Access License (SAL) reports to assist Managed Service Providers with user logon reports.

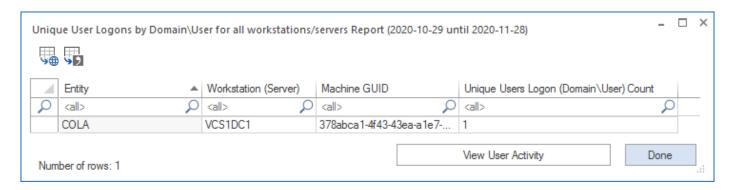
This report uses a date range selector:



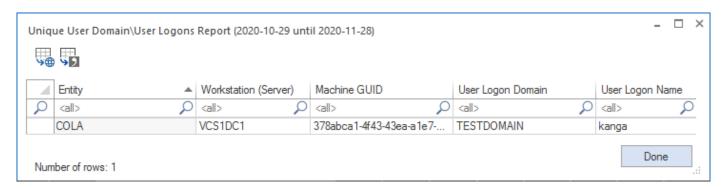
Columns include:

Entity, Workstation/Server, Machine GUID, Count of Unique Users

The report has one row per Workstation/Server with any usage during the reporting period:



Click the 'View User Activity' button to reveal the list of unique users (only those with a Domain\Username logon value) for selected rows:

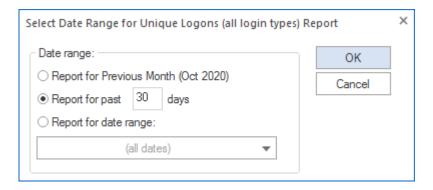


Device Report: Summary+Detail Unique Users [All Logon types]

For any workstation or server using the SofTrack STSLAM Agent, Logon Activity will be gathered.

The SPLA (Service Provider License Agreement) User Logon Reports provide Subscriber Access License (SAL) reports to assist Managed Service Providers with user logon reports.

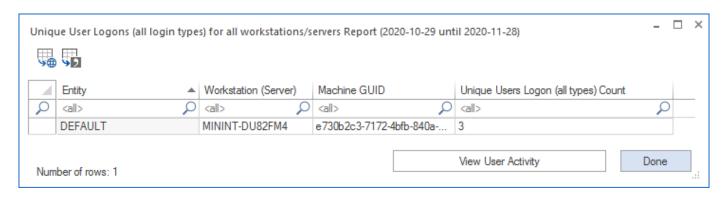
This report uses a date range selector:



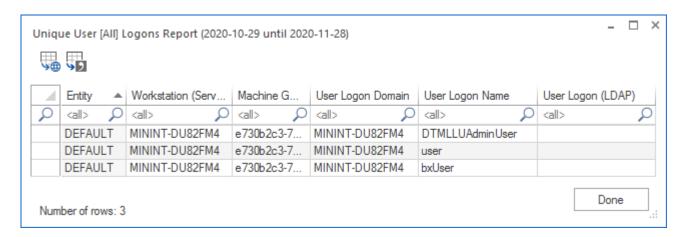
Columns include:

Entity, Workstation/Server, Machine GUID, Count of Unique Users

The report has one row per Workstation/Server with any usage during the reporting period:



Click the 'View User Activity' button to reveal the list of unique users (all logon types) for selected rows:



Device Report: Summary+Detail Unique Users per Domain

For any workstation or server using the SofTrack STSLAM Agent, Logon Activity will be gathered.

The SPLA (Service Provider License Agreement) User Logon Reports provide Subscriber Access License (SAL) reports to assist Managed Service Providers with user logon reports.

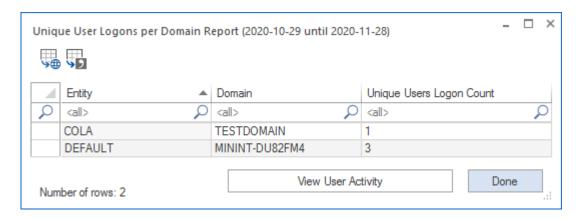
This report uses a date range selector:



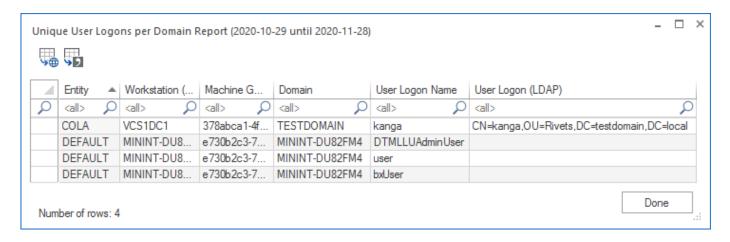
Columns include:

Entity, Domain Count of Unique Users

The report has one row per Workstation/Server with any usage during the reporting period:



Click the 'View User Activity' button to reveal the list of unique for selected rows:



Note: A workstation/server with no defined Domain will use that machine's Computer name as the Domain name.

SofTrack Managed Assets Administrator Guide



Managed Views: Overview

SofTrack Managed Assets Managed Views provides the ability to create customized views of Applications and Devices including the ability to manually add Applications and Devices. Additionally, any detail (such as who installed, when will retire, etc.) and any and all records can be centrally stored for any Application and Device.

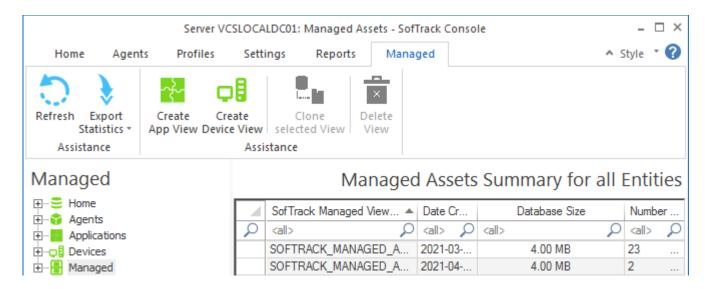
All Managed Views are stored in separate SQL Databases. There are 2 prefixes for Managed View Databases:

SOFTRACK MANAGED APPS

SOFTRACK MANAGED DEVICES

Managed Views

The Managed section of the SofTrack Console provides the ability to create customized views of Application and Device data including manually added Applications and Devices including non-workstation devices.



The idea of Managed Views (customized views) allows direct control over how Applications and Devices are viewed and managed.

Managed Views allows combining of Applications and Devices from multiple Entities.

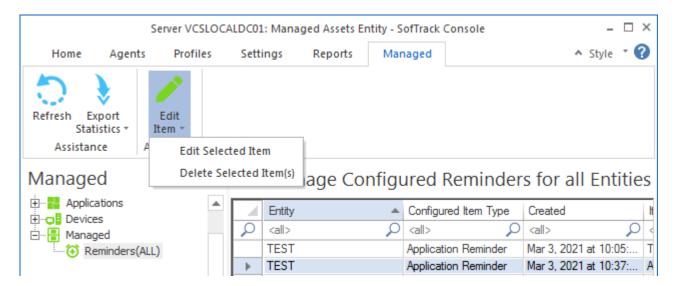
Managed Views allow unlimited notations per Application or Device.

Managed Views separately allows relevant data to be defined and stored, lists of serial numbers, vendor details, purchase records (any file type, images, pdf, documents, xls, etc), renewal dates and more.

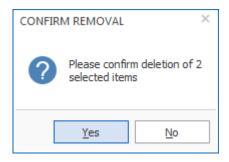
Additionally, Reminders can be directly set within any Managed View.

Edit/Delete Reminders

The first section within the Managed section is Reminders(ALL). This built-in section provides the ability to edit/delete all Reminders created for any Entity or Managed View.

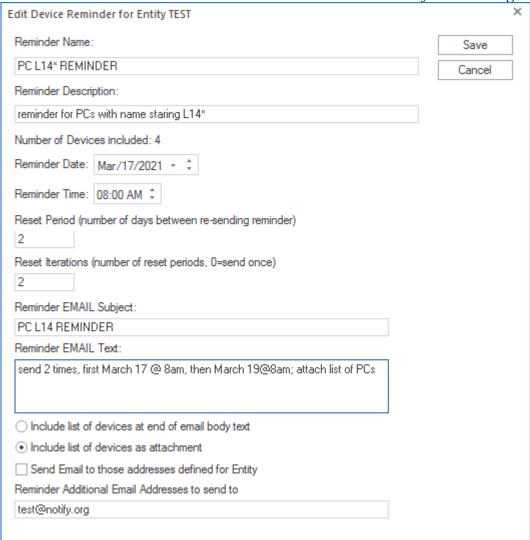


If Delete is selected, a confirming prompt will be presented:



If Edit is selected, the following will be presented:

SofTrack Managed Assets Administrator Guide

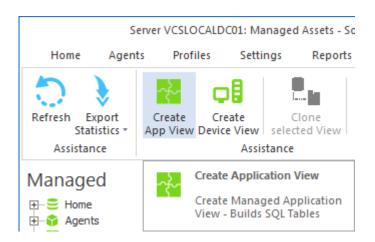


All items of the Reminder can be changed except for the list of Devices or Applications included.

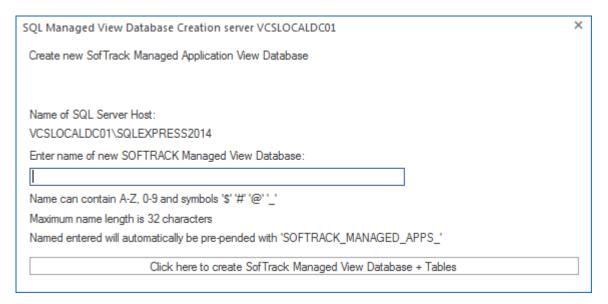
Managed View: Applications

This section will further describe the Application Managed View. To start, click on the Managed section and then click the Create App View ribbon button:

Creating an Application Managed View

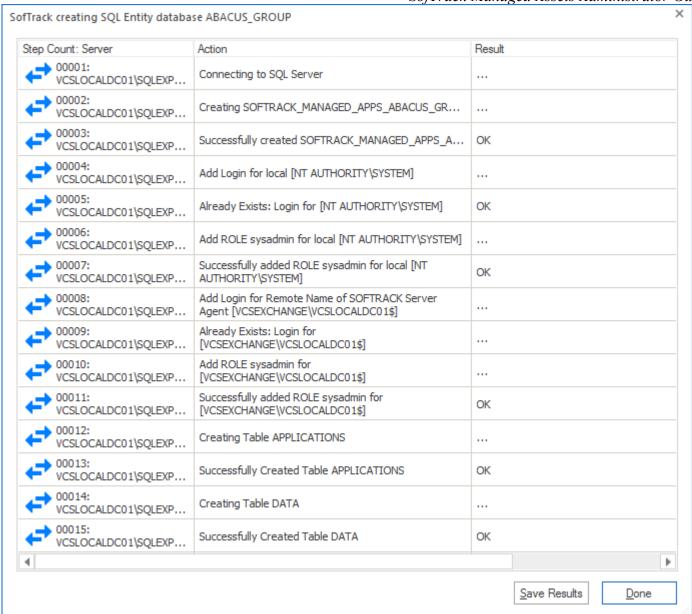


The following prompt will be presented:



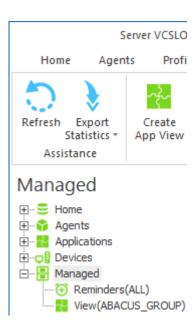
Enter a name for the new Application View. This name will be pre-pended (as shown in the image above) with the text "SOFTRACK_MANAGED_APPS_". When ready, click the "Click here to create..." button and a new database will be created in SQL including 2 tables, one named APPLICATIONS and one named DATA. The following response will be shown:

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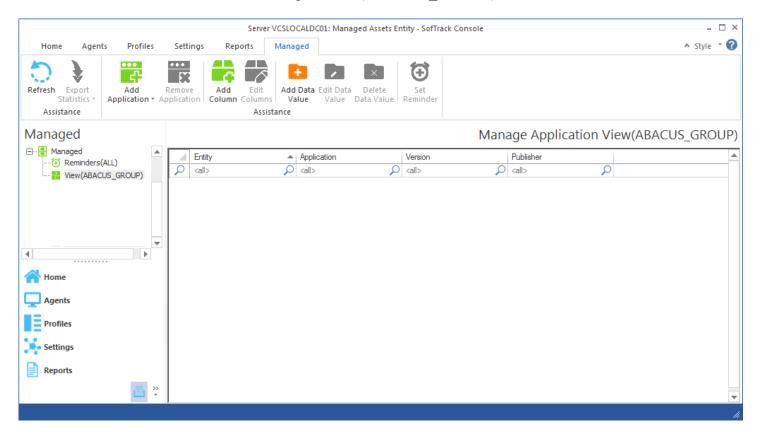
Notice, the "Save Results" button, if clicked, a prompt to enter a filename will be presented and the results of the window will be saved to the selected file.

After clicking Done, the new Application View will be added to the list:



Editing an Application Managed View

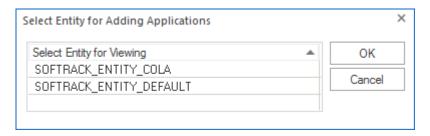
To edit, click on the new item, in this example: View(ABACUS GROUP):

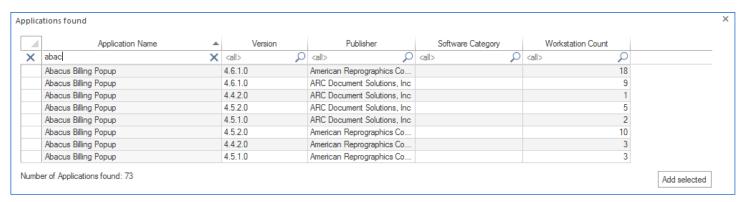


Initally, the Application View is blank. To begin, click on the Add Application button:



There are 2 selections, the first, Add Applications from an existing Entity will present a list of Entities and then the list of Applications stored in that Entity's SQL database.





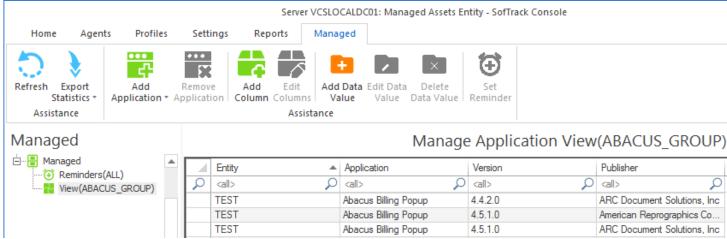
Notice in the image above, the list of applications can be quickly filtered for each column by typing in any matching text. In the image above "abac" is typed into the filter for the first column.

Next, select the desired applications, if all are to be selected, click the top left button (at the column header level), this will select all shown filtered results.



Then, click the Add selected button and the selected Applications will immediately be added. When finished, click the "X" at the top right of the window:



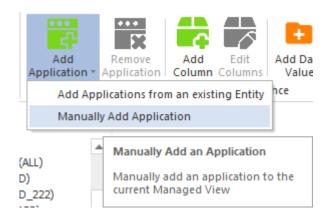


To remove any application(s), select each and then click the Remove Application button. This button will be grayed/disabled unless one or more applications are selected.

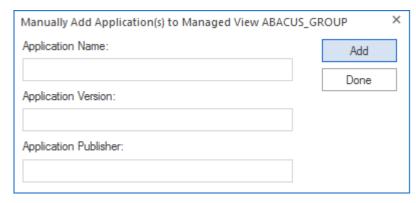
Notice the columns, Entity Name, Application Name, Application Version and Application Publisher. The values shown are directly from the Entity database for each select application. Once Applications are added to this Managed View, they will remain, as there is no further connection to the Entity's current applications. Thus, if the Applications shown are removed from the source Entity (including if that Entity is removed), each will remain in the Managed Application view until directly removed.

Note:

The same Applications can be included in multiple Managed Views, there is no limitation regarding how often each are included.



The second option, Manually Add Application, will present a prompt for details of the application to add. When manually adding an application, it is only added to the Managed View, it is not associated with any Entity.



Sample result:



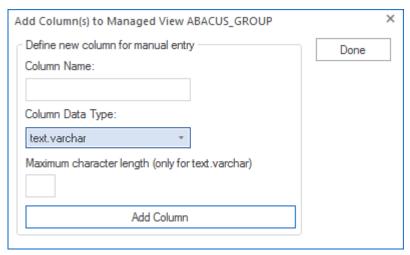
Notice, the Entity name is "#MANUAL#", this value is always used for all Manual entries.

Adding custom columns to an Application Managed View

Next, the Add Column button enables definition of new columns that will be added to the SQL table (named APPLICATIONS). There are several data types available:



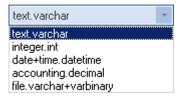
Once clicked, the following will appear:



The Column Name can be up to 32 characters. Allowed characters include A-Z, a-z, 0-9, and the symbols @ #\$. All other characters will be converted to an underscore " ".

The Column Data Type has several selections:

Column Data Type:



For the text.varchar column type, the maximum character length is from 4 to 512 (only applicable to text column type).

The "file.varchar+varbinary" will actually create 2 columns, one for the original filename (including path) and the other for that file's actual content. The maximum file size is currently set to 5MB, if you require a larger file size, please contact support@softwaremetering.com and indicate the required file size and we will provide an update.

When Add Column is clicked the column is added to the SQL Table (APPLICATIONS) and will allow NULL values meaning each row is not required to have a value defined for the new column.

The prompt dialog will remain until the "Done" button is clicked. This enables defining several columns without having to re-open the Add Columns dialog for each.

Important note:

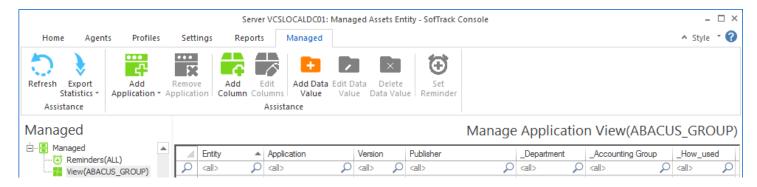
As will be described in a later section, the customized SQL Table columns created <u>can be cloned</u>, this eases the re-use of your customizations for multiple Managed Views

After adding columns, click the Refresh button to rebuild the list:



The following are some sample columns created. There are no restrictions on the number of columns that can be created.

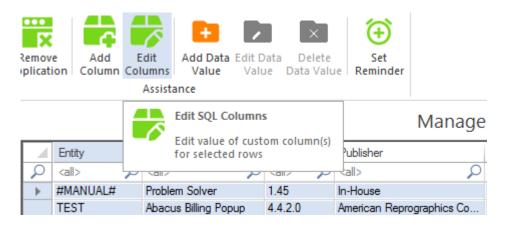
Notice, each column name is prepended with an underscore "_", this is intentional and is used to indicate custom columns. The prepended underscore is automatic.



The column order will be as created.

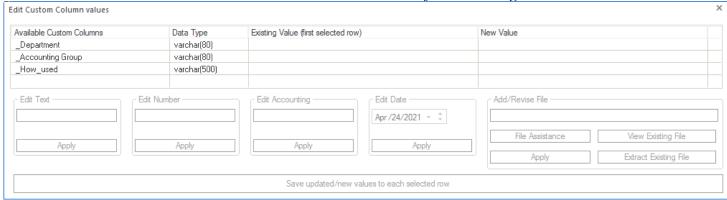
Editing custom columns in an Application Managed View

Next, to add values to each custom column defined, select one or more rows and click the Edit Columns button:

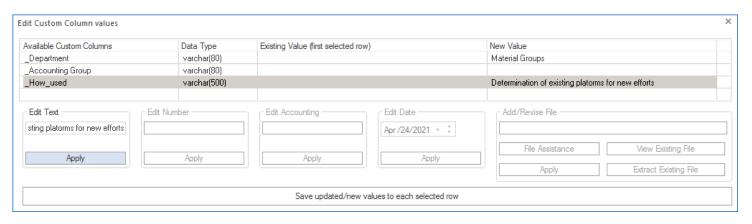


And the following window will appear:

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This window allows editing of all custom values for each select row. To begin, select a custom column and its data type will be enabled for data entry:



Click the Apply button to update the New Value (as shown above).

When finished, click the "Save upated/new values to each selected row" button. The SQL Table will be updated and new values shown:

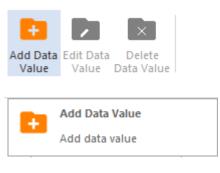
Manage Application View(ABACUS_GROUP)

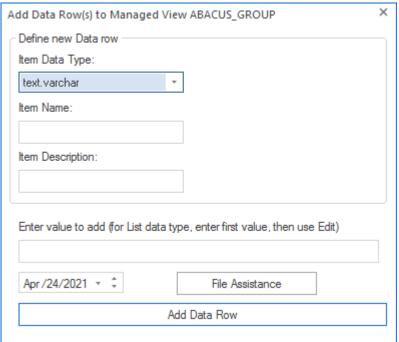
	Entity		Application	Version	Publisher	_Department	_Accounting Group	_How_used
2	<all></all>	Q	<all></all>	<all></all>	<all></all>	<al> <al> <al> <al> <al> <al> <al> <al></al></al></al></al></al></al></al></al>	<all></all>	<all></all>
	#MANUAL	Ħ	Problem Solver	1.45	In-House	Material Groups		from here to there
	TEST		ST Abacus Billing Popup 4.4.2.0 An		American Reprographics Co	Material Groups		from here to there

Adding Data rows in an Application Managed View

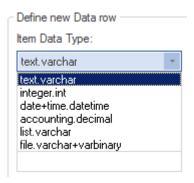
Each Managed View has 2 lists (also called 'grids'). The first is the list of included Applications and any custom columns. The second list is of data associated with those Applications. The data items can include any variety of information including Vendor details, Vendor invoices, Renewal Dates, Third party support details, and any other details.

To add a data row, click the Add Data Value button:





There are several data types available:



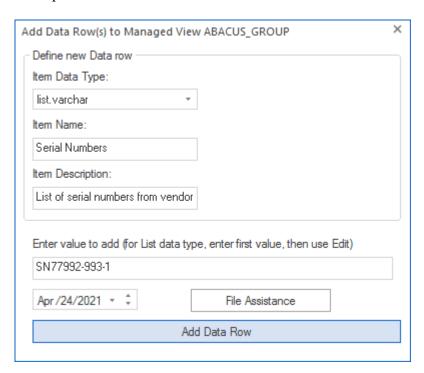
Each item must include an Item Name. The Item Name can be up to 126 characters and is free form. The item Description is optional and can be up to 254 characters.

The combination of Item Data Type + Item Name must be unique for the selected Managed View.

The value of the Item can be up to 512 characters.

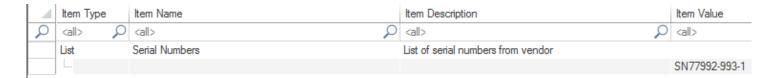
When using the list.varchar data type, only the first value (of the list) can be entered on this screen. Once the initial data row is created use the Edit Data Value button to manage the list values.

Example:



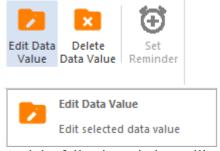
When ready, click the Add Data Value button. When complete, close the window by clicking on the [X] at the upper right corner of the dialog window.

As each value is added it is immediately saved to the SQL Table and will also be shown in the Data section:

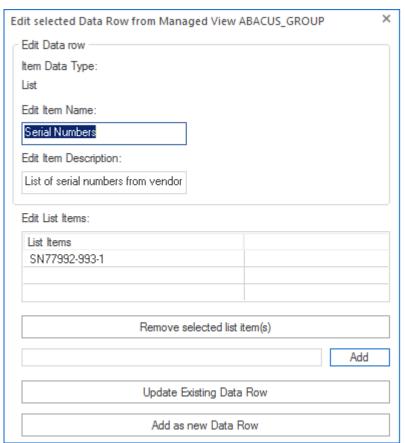


Editing Data rows in an Application Managed View

To edit a Data row (only a single data row can be edited at a time), select the desired data row and click the Edit Data Value button:



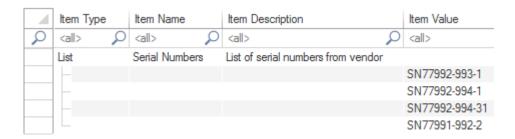
And the following window will appear (for List data type):



Please note, the Item Data Type cannot be edited. For list items, use the Remove selected list item(s) and Add buttons (entering new values in the edit field to the left of the Add button).

When ready, there are two options, Update Existing Data Row (full in-place replacement of the row in the Data SQL Table), or, Add as new Data Row (only possible if the Item name has been changed as Item Data Type + Item Name must be unique in the Data SQL Table for the selected Managed View.

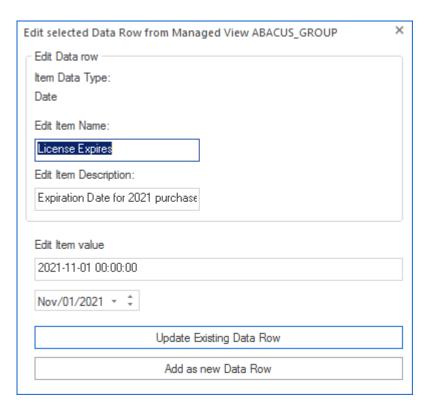
Example:



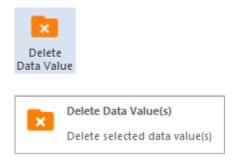
Note: For List items, the list can be closed and opened by clicking on the value "List" in the Item Type column; this will toggle the list to be closed/open, below shows the same list (as above), closed:



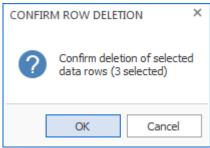
When editing other data types (other than List) the following (or similar) window will appear:



To remove one or more data rows, select the rows and then click the Delete Data Row button:



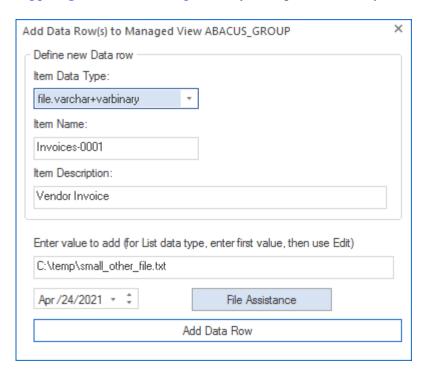
And a confirming prompt will appear:



If OK is clicked, the selected rows are immediately deleted from the DATA SQL Table for the selected Managed View. Caution: there is no "undo delete" function.

Editing, Viewing and Extracting FileType Data rows in an Application Managed View

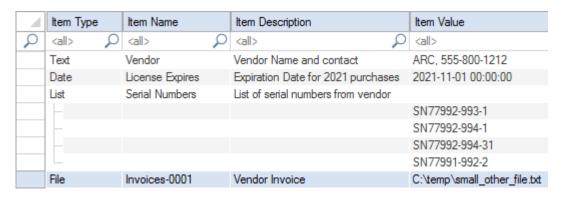
Building on the previous section, if the file.varchar+varbinary data type is selected, then a file can be added to the Data SQL table. The maximum file size allowed is 5MB. Please contact support@softwaremetering.com if you require the ability to store a larger file.



Use the File Assistance (highlighted above) button to open an Explorer window to locate the file. The entire file path will be stored in the data row and the file's actual contents will also be stored in a separate column within the SQL Table.

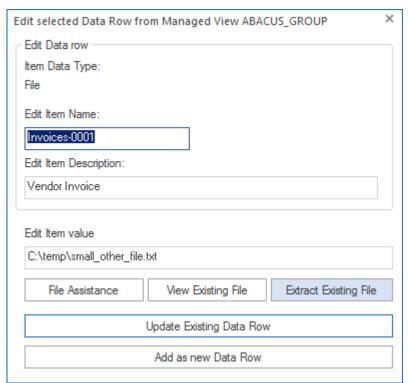
The maximum file name length is 512 characters.

The following is a sample result:



Notice, the file's data is not shown in the row.

To retrieve the file, select the data row and click the Edit Data Value button and the following window will appear:



Notice there are 2 additional buttons (versus the Add Data Value prompt).

View Existing File and Extract Existing File.

If the file has an association within Windows, the View Existing File will auto-open that file in its native viewer.

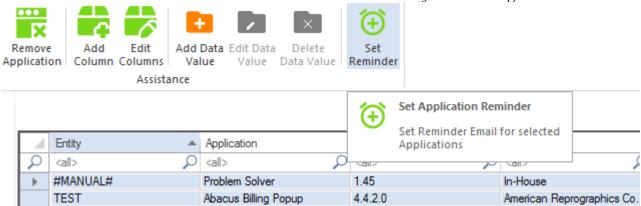
However, if the file type is.exe, .lnk, .msi, .com or .dll; then the file will not be opened as it would attempt to start the executable.

If the file type is .bat, .ps, ps1; then the selected file will be opened in NOTEPAD.EXE instead of being run.

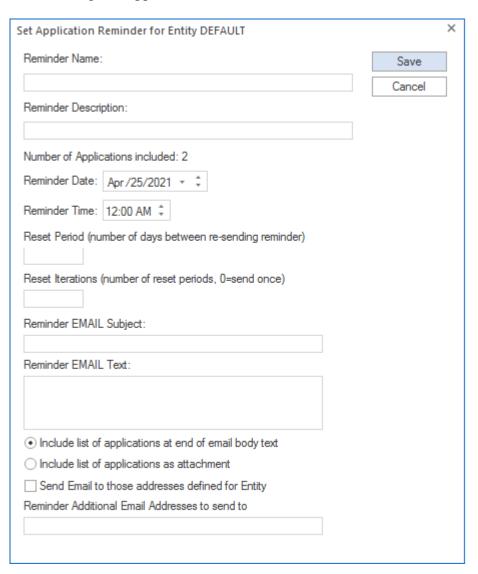
When the Extract Existing File is clicked, a Windows Explorer view will appear to assist in locating the path to extract the file to. Notice, the entire file path is stored in the data row, however, when extracting only the filename will be used and will be saved to the selected path.

Setting an Email Reminder in an Application Managed View

An email reminder can be configured for one or more applications contained within an Application Managed View. To start, select one or more application rows and click the Set Reminder button:



the following will appear:



Notice in the window caption, it indicates an Entity name (DEFAULT as shown above). The Entity of the first selected row is used. This is important because that <u>Entity's email configuration</u> is what will be used to send the Email Reminder.

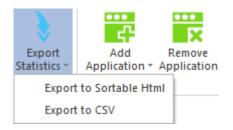
If the Entity for the first selected row is "#MANUAL#" then the "DEFAULT" Entity will be used for the configuration.

If there are multiple Entities selected the Reminder will only use the email configuration of the first selected row.

The Reminder configuration is further detailed in a previous section, <u>click here for details</u>.

Exporting values from an Application Managed View

To create an HTML report or Export CSV of an Application Managed View, click the Export Statistics button:



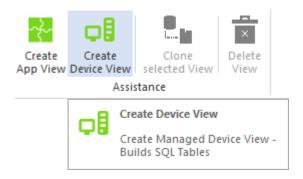
When creating an HTML report, two files will be created, one for the rows of Applications and one for the Data grid. The file for the Data grid will have the same name as the Applications grid except with "_data" appended to the filename.

The export does not include the data of any File stored within either list, only its original filename. To retrieve the File, please use the Edit Column or Edit Data Value button.

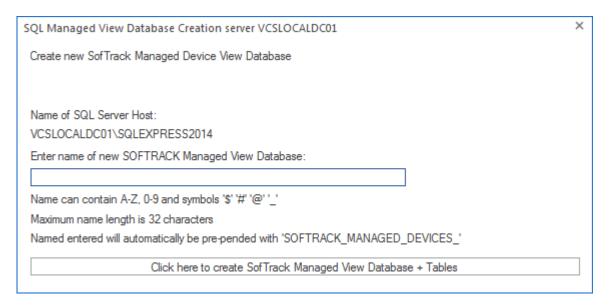
Managed View: Devices

This section will further describe the Devices Managed View. To start, click on the Managed section and then click the Create Device View ribbon button:

Creating a Device Managed View

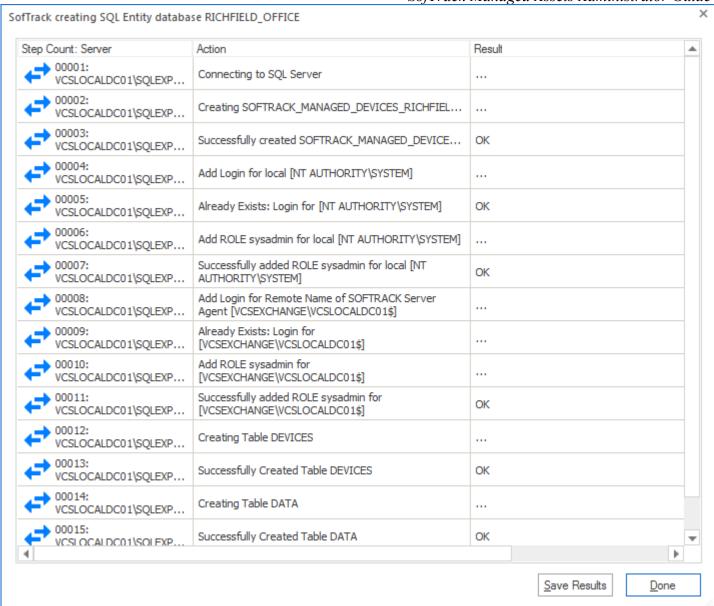


The following prompt will be presented:



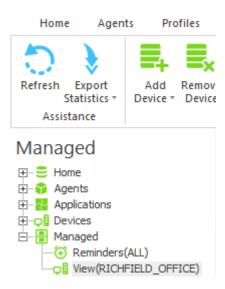
Enter a name for the new Device View. This name will be pre-pended (as shown in the image above) with the text "SOFTRACK_MANAGED_DEVICES_". When ready, click the "Click here to create..." button and a new database will be created in SQL including 2 tables, one named DEVICES and one named DATA. The following response will be shown:

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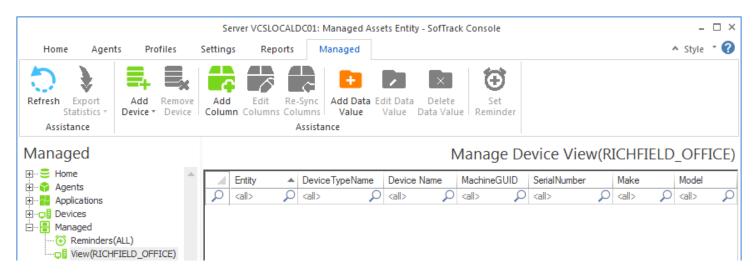
Notice, the "Save Results" button, if clicked, a prompt to enter a filename will be presented and the results of the window will be saved to the selected file.

After clicking Done the new Device View will be added to the list:



Editing a Device Managed View

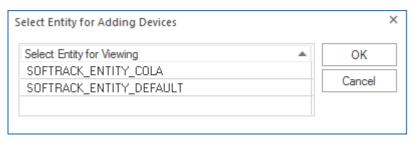
To edit, click on the new item, in this example: View(RICHFIELD OFFICE):

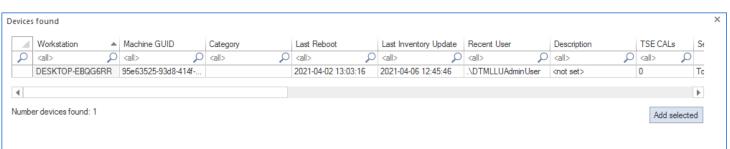


Initially, the Device View is blank. To begin, click on the Add Device button:



There are 2 selections, the first, Add Devices from an existing Entity will present a list of Entities and then the list of Devices stored in that Entity's SQL database.





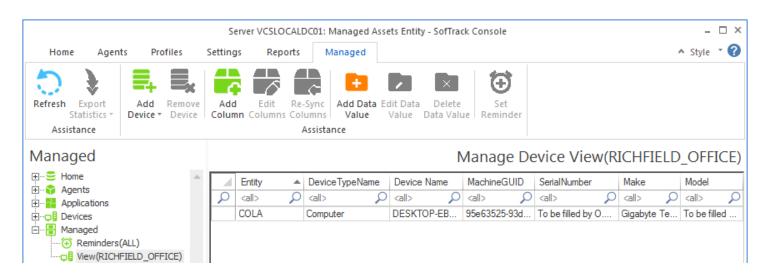
Notice in the image above, the list of devices can be quickly filtered for each column by typing in any matching text.

Next, select the desired devices, if all are to be selected, click the top left button (at the column header level), this will select all shown filtered results.



Then, click the Add selected button and the selected Applications will immediately be added. When finished, click the "X" at the top right of the window:



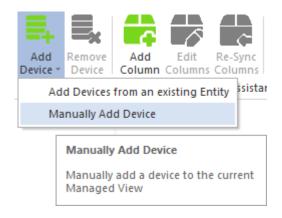


To remove any devices(s), select each and then click the Remove Device button. This button will be grayed/disabled unless one or more devices are selected. A confirming prompt will be present prior to deletion.

Notice the columns, Entity Name, DeviceTypeName, Device Name, MachineGUID, SerialNumber, Make and Model. The values shown are directly from the Entity database for each selected device. Once Devices are added to the current Managed View, they will remain, as there is no further connection to the Entity's current devices. Thus, if the Devices shown are removed from the source Entity (including if that Entity is removed), each will remain in the Managed Device view until directly removed.

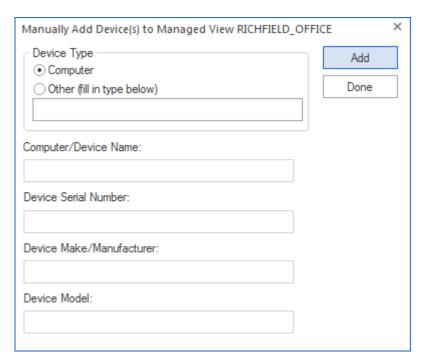
Note:

The same Devices can be included in multiple Managed Views, there is no limitation regarding how often each are included.



The second option, Manually Add Device, will present a prompt for details of the device to add.

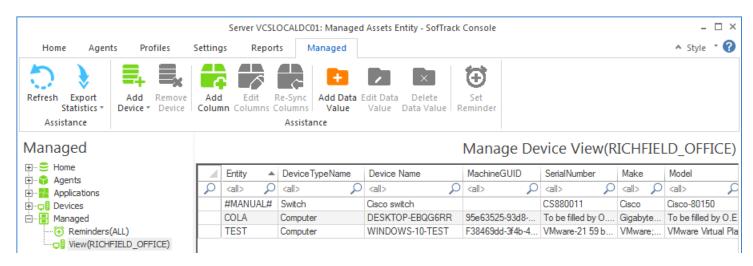
When manually adding a device, it is only added to the current Managed View, it is not associated with any Entity.



The Device Type defaults to Computer, but any device type can be defined. This can be useful for tracking details of non-computer devices, including printers, switches, phones, even furniture, anything at all.

When ready, click the Add button. The prompt will remain, easing entry of multiple devices. When complete, click the Done button.

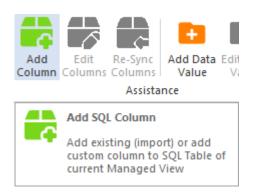
Sample result:



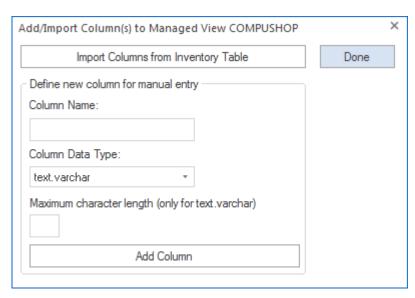
Notice, the Entity name is "#MANUAL#", this value is always used for all Manual entries.

Adding custom columns to a Device Managed View

Next, the Add Column button enables definition of new columns that will be added to the SQL table (named DEVICES).

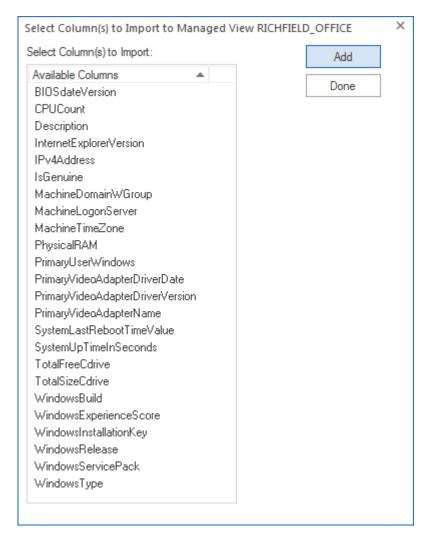


Once clicked, the following will appear:



The Import Columns from Inventory Table button provides the ability to include additional columns (in addition to the default columns included from the source Entity, specifically Entity Name, DeviceTypeName, Device Name, MachineGUID, SerialNumber, Make and Model).

When clicked the following will appear:



The list above is from the INVENTORY table definition included by each Entity.

The list shown are the columns that are available, if one more more columns have been previously imported each will not be included in the list of available columns.

When added, the data for these columns will be copied from the selected device's Entity. Additionally, the <u>Re-Sync Columns</u> button can be used to re-fetch those values and update what is stored in the Device Managed View. The Re-Sync Columns button will be further detailed in a following section.

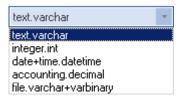
When a column is imported, its name, data type and maximum text length are provided by the INVENTORY table definition and require no further configuration.

When adding a new column, the following applies:

The Column Name can be up to 32 characters. Allowed characters include A-Z, a-z, 0-9, and the symbols @ #\$ _. All other characters will be converted to an underscore "_".

The Column Data Type has several selections:

Column Data Type:



For the text.varchar column type, the maximum character length is from 4 to 512 (only applicable to text column type).

The "file.varchar+varbinary" will actually create 2 columns, one for the original filename (including path) and the other for that file's actual content. The maximum file size is currently set to 5MB, if you require a larger file size, please contact support@softwaremetering.com and indicate the required file size and we will provide an update.

When Add Column is clicked the column is added to the SQL Table (DEVICES) and will allow NULL values meaning each row is not required to have a value defined for the new column.

The prompt dialog will remain until the "Done" button is clicked. This enables defining several columns without having to re-open the Add Columns dialog for each.

Important note:

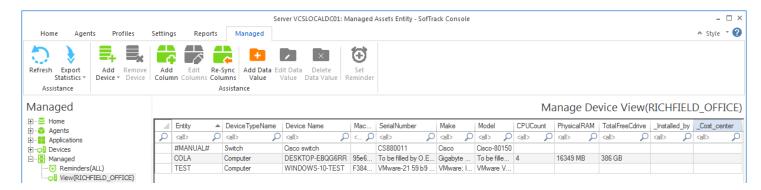
As will be described in a later section, the customized SQL Table columns created <u>can be cloned</u>, this eases the re-use of your customizations for multiple Managed Views

After adding columns, click the Refresh button to rebuild the list:



The following are some sample columns that are both imported and created. There are no restrictions on the number of columns that can be created.

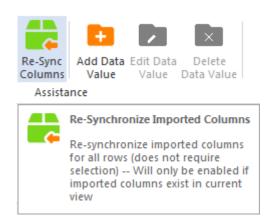
Notice, each custom column name is prepended with an underscore "_", this is intentional and is used to indicate custom columns. Imported column names remain as originally defined in the INVENTORY table.



The column order will be as created/imported.

Re-Sync imported columns in a Device Managed View

When imported columns exist in a Device Managed View the Re-Sync Columns button will be active.



When clicked, all rows (selected or not) that are from an Entity (not manually added) will be updated from the source Entity with its current values. The Re-Sync Columns only occurs when the button is clicked. There is not a linkage between SQL Database Tables to always synchronize the values. This enables control over when the data is updated.

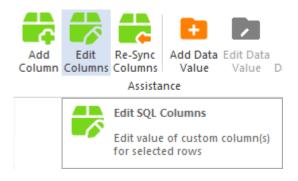
When clicked, there is no status screen presented, the mouse cursor will change to a waiting indication (typically an hourglass but depends on the settings of the local Windows operating system the Console is

running upon) while in-process and then revert when complete, and the values shown will be updated after clicking the Refresh button at the upper left.

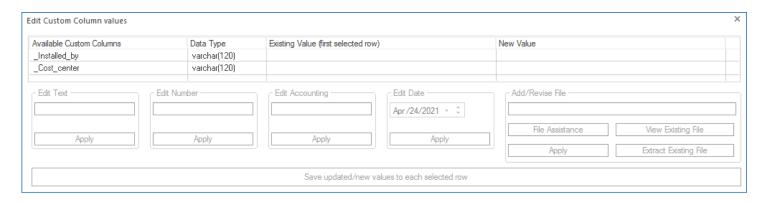


Editing custom columns in a Device Managed View

To add / edit values to each custom column defined, select one or more rows and click the Edit Columns button:

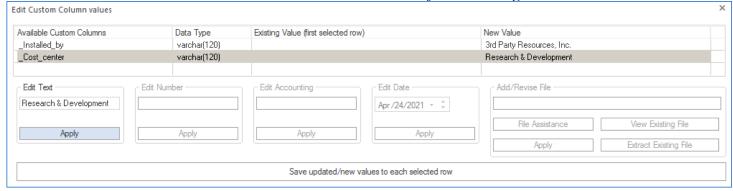


And the following window will appear:



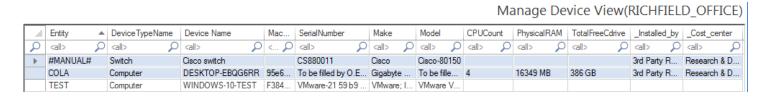
This window allows editing of all custom values for each selected row. To begin, select a custom column and its data type will be enabled for data entry:

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Click the Apply button to update the New Value (as shown above).

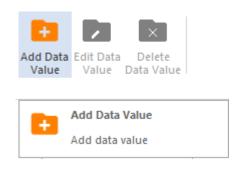
When finished, click the "Save upated/new values to each selected row" button. The SQL Table will be updated and new values shown:

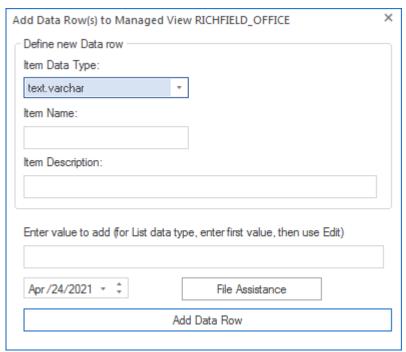


Adding Data rows in a Device Managed View

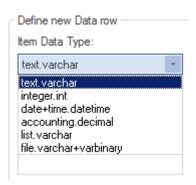
Each Managed View has 2 lists also called 'grids'. The first is the list of included Devices and any imported + custom columns. The second list is of data associated with those Devices. The data items can include any variety of information including Vendor details, Vendor invoices, Renewal Dates, Third party support details, and any other details.

To add a data row, click the Add Data Value button:





There are several data types available:



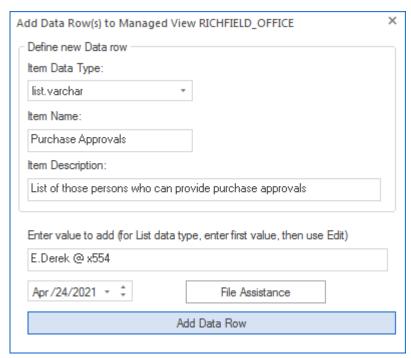
Each item must include an Item Name. The Item Name can be up to 126 characters and is free form. The item Description is optional and can be up to 254 characters.

The combination of Item Data Type + Item Name must be unique for the selected Managed View.

The value of the Item can be up to 512 characters.

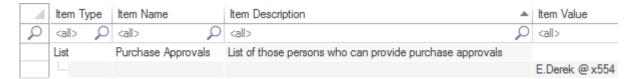
When using the list.varchar data type, only the first value (of the list) can be entered on this screen. Once the initial data row is created use the Edit Data Value button to manage the list values.

Example:



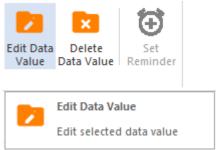
When ready, click the Add Data Row button. When complete, close the window by clicking on the [X] at the upper right corner of the dialog window.

As each value is added it is immediately written to the SQL Table and will also be shown in the Data grid:

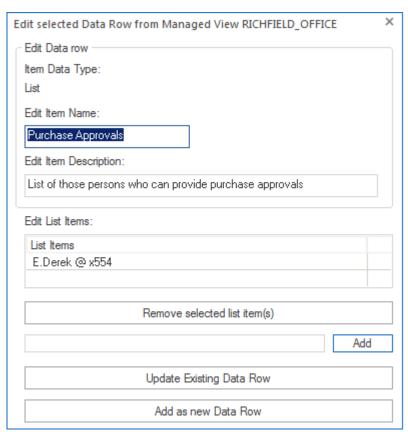


Editing Data rows in a Device Managed View

To edit a Data row (only a single data row can be edited at a time), select the desired data row and click the Edit Data Value button:



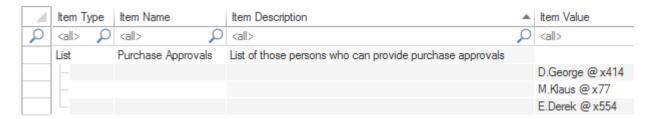
And the following window will appear (for List data type):



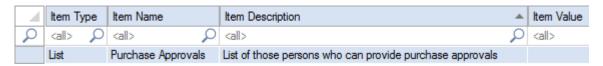
Please note, the Item Data Type cannot be edited. For list items, use the Remove selected list item(s) and Add buttons (entering new values in the edit field to the left of the Add button).

When ready there are two options, Update Existing Data Row (full in-place replacement of the row in the Data SQL Table), or, Add as new Data Row (only possible if the Item name has been changed as Item Data Type + Item Name must be unique in the Data SQL Table for the selected Managed View.

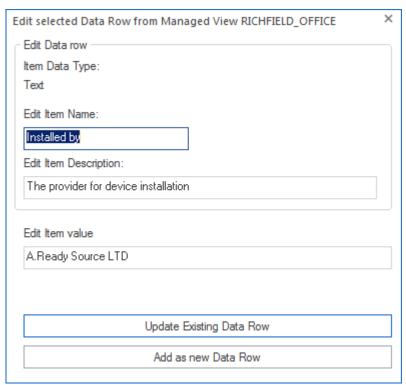
Example:



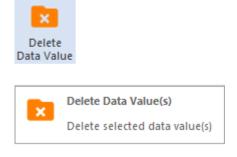
For List items, the list can be closed and opened by clicking on the value "List" in the Item Type column; this will toggle the list to be closed/open, below shows the same list (as above), closed:



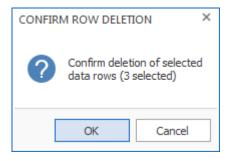
When editing other data types (other than List) the following (or similar) window will appear:



To remove one or more data rows, select the rows and then click the Delete Data Row button:



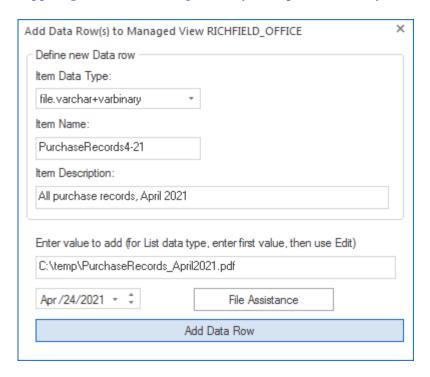
And a confirming prompt will appear:



If OK is clicked, the selected rows are immediately deleted from the DATA SQL Table for the selected Managed View. Caution, there is no "undo delete" function.

Editing, Viewing and Extracting FileType Data rows in a Device Managed View

Building on the previous section, if the file.varchar+varbinary data type is selected, then a file can be added to the SQL table. The maximum file size allowed is 5MB. Please contact support@softwaremetering.com if you require the ability to store a larger file.



Use the File Assistance (highlighted above) button to open an Explorer window to locate the file. The entire file path will be stored in the data row and the file's actual contents will also be stored in a separate column within the SQL Table.

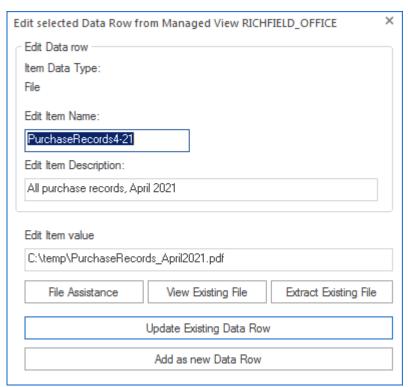
The maximum file name length is 512 characters.

The following is a sample result:



Notice, the file's data is not shown in the row.

To retrieve the file, select the data row and click the Edit Data Value button and the following window will appear:



Notice there are 2 additional buttons (versus the Add Data Value prompt).

View Existing File and Extract Existing File.

If the file has an association within Windows, the View Existing File will auto-open that file in its native viewer.

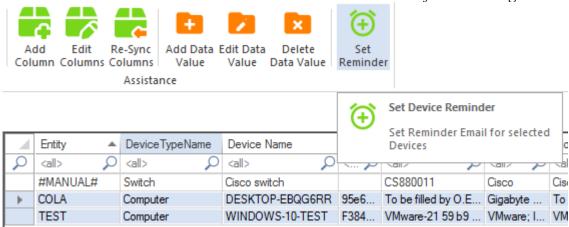
However, if the file type is.exe, .lnk, .msi, .com or .dll; then the file will not be opened as it would attempt to start the executable.

If the file type is .bat, .ps, ps1; then the selected file will be opened in NOTEPAD.EXE instead of being run.

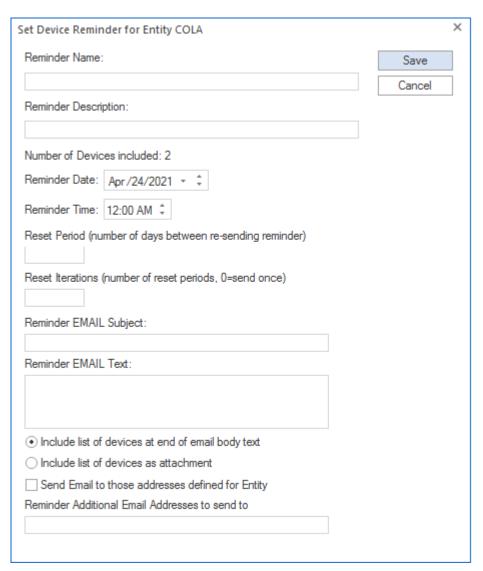
When the Extract Existing File is clicked, a Windows Explorer view will appear to assist in locating the path to extract the file to. Notice, the entire file path is stored in the data row, however, when extracting only the filename will be used and will be saved to the selected path.

Setting an Email Reminder in a Device Managed View

An email reminder can be configured for one or more devices contained within a Device Managed View. To start, select one or more device rows and click the Set Reminder button:



the following will appear:



Notice in the window caption, it indicates an Entity name (COLA as shown above). The Entity of the first selected row is used. This is important because that <u>Entity's email configuration</u> is what will be used to send the Email Reminder.

If the Entity for the first selected row is "#MANUAL#" then the "DEFAULT" Entity will be used for the configuration.

If there are multiple Entities selected the Reminder will only use the email configuration of the first selected row.

The Reminder configuration is <u>further detailed in a previous section</u>.

Exporting values from a Device Managed View

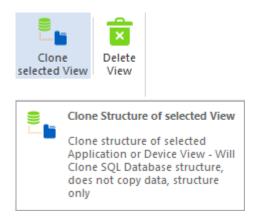
To create an HTML report or Export CSV of a Device Managed View, click the Export Statistics button:



When creating an HTML report, two files will be created, one for the rows of Devices and one for the Data grid. The file for the Data grid will have the same name as the Devices grid except with "_data" appended to the filename.

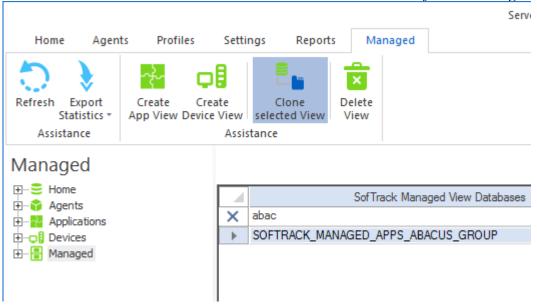
The export does not include the data of any File stored within either list, only its original filename. To retrieve the File, please use the Edit Column or Edit Row button.

Cloning Managed View Database + Tables

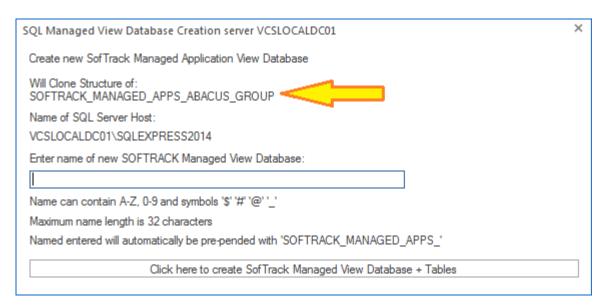


The structure of Managed Views can be very customized (Application or Device grid) with unique column definitions.

To enable easy replication of the column structure of the SQL Database+Tables of a Managed View, select Managed section, and then select the Managed View to clone:

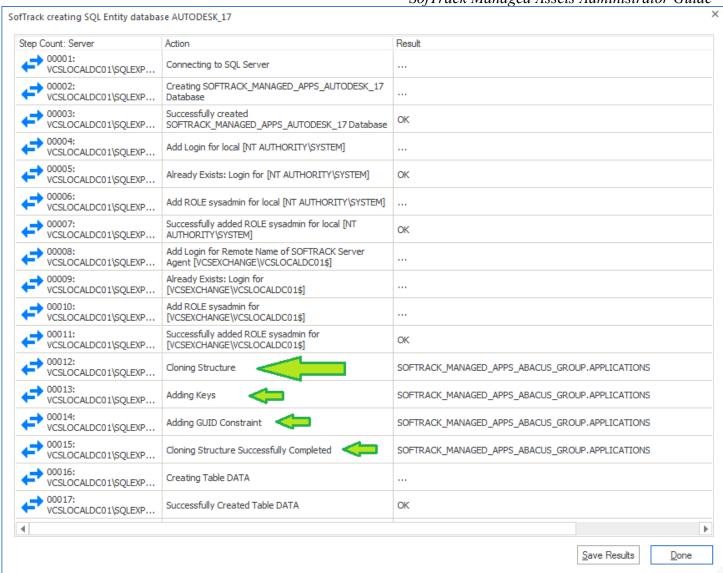


Click the Clone selected View button and the following will be presented:



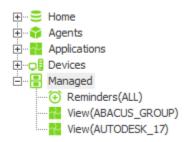
Enter name for new Managed View and click the "Click here to create.." button and the following will be presented, notice only the "APPLICATIONS" (or "DEVICES") table is cloned, the Data table is not cloned because it has no custom SQL column definitions.

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Once complete, click the Save Results button to save the text shown on the results screen.

The new Managed View will now be included:

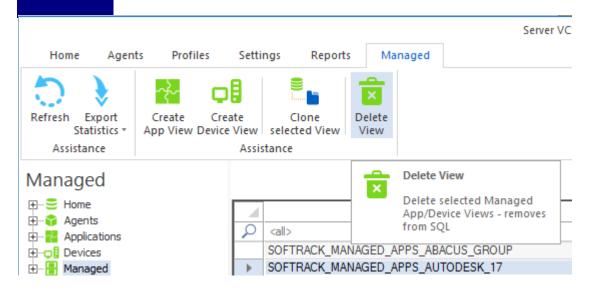


And will have the same SQL column definitions as the donor Managed View.

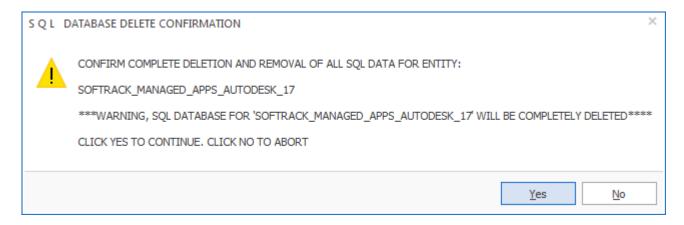
Note: The contents of the donor Managed View are NOT COPIED, only its SQL Column Structure is copied.

Deleter ged View

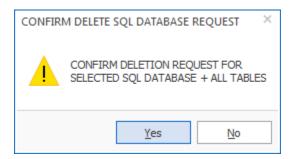
When a Managed View is to be deleted, select the Managed section and then select the Managed View to complete remove / delete from SQL:



Two confirming deletion prompts will be presented per selected Managed View:



and



Caution: Once deleted there is no undo function. This function only "drops" the SQL Database for the selectedg Managed View, it does not make any other changes. For instance, if Reminders have been created for the now deleted Managed View, they will remain and <u>must be separately deleted</u>.

Chapter 9 SQL Tables

• • •

SQL Reference

For each Managed Assets Entity a SQL database is created that includes multiple tables. This section is a technical reference of each Table and its definitions.

All Tables are connectable via the combination of the ComputerName and MachineGUID columns.

Table: INVENTORY

The INVENTORY table defines for single enumeration items. For inventory items with multiple possible values (enumerations) an additional table exists. This table and all INVENTORY_* tables (each defined in this section) maintain the most recent values for each ComputerName + MachineGUID combination. When a new inventory is received (from the ST_SLAM agent) it overwrites all previous entries including removal of enteries no longer found.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[DeviceType] [int] NULL
Defined value: (1 = PC/workstation)
[DateTimeGathered] [datetime] NOT NULL
Value indicates time recorded inserted into this Table
[ComputerName] [varchar] (64) NOT NULL
[MachineGUID] [varchar] (128) NOT NULL
Value is from the Windows® registry of the named Computer, it is generated by
Microsoft, if value is replicated on multiple Computers it indicates each share a
common image for the Windows® operating system
[SerialNumber] [varchar] (64) NULL
Value is from the BIOS of the Computer, typically assigned by its manufacturer
[Make] [varchar] (64) NULL
[Model] [varchar] (64) NULL
[BIOSdateVersion] [varchar] (64) NULL
[WindowsType] [varchar] (64) NULL
```

```
[WindowsServicePack] [varchar] (64) NULL
[WindowsBuild] [varchar] (24) NULL
[WindowsRelease] [varchar](6) NULL
[TSEcals] [int] NULL
Value will be 0 except when Computer is a Windows® terminal server and has
RDS/CALs installed
Note: If this inventory record provided by Importing of Smart Inventory records
will always be zero; only when inventory record is provided by the ST SLAM agent
will non-zero value be provided
[BaseMachine] [varchar] (64) NULL
[PhysicalRAM] [varchar] (64) NULL
[CPUCount] [int] NULL
[TotalSizeCdrive] [varchar] (20) NULL
[TotalFreeCdrive] [varchar] (20) NULL
[IPv4Address] [varchar] (16) NULL
Note: Only the first IPv4 address of the workstation is recorded
[WindowsExperienceScore] [varchar] (16) NULL
[InternetExplorerVersion] [varchar] (64) NULL
[WindowsInstallationKey] [varchar] (128) NULL
[IsGenuine] [varchar](4) NULL
Value is "..." (3 dots) if unknown, version of Windows® operating system is too
old, otherwise value is YES or NO
[Description] [varchar] (128) NULL
[PrimaryUserWindows] [varchar] (512) NULL
Note: this value is typically the most recent user to logon to Computer
[SystemLastBootTime] [varchar] (64) NULL
[SystemUpTimeInSeconds] [int] NULL
[SystemLastRebootTimeDWORD] [bigint] NULL
[SystemLastRebootTimeValue] [datetime] NULL
[MachineDomainWGroup] [varchar] (32) NULL
Note: WGroup = Worksgroup, value could be Domain name or Workgroup name
[MachineLogonServer] [varchar] (32) NULL
[MachineTimeZone] [varchar] (128) NULL
[PrimaryVideoAdapterName] [varchar] (128) NULL
[PrimaryVideoAdapterDriverDate] [varchar] (64) NULL
[PrimaryVideoAdapterDriverDate] [varchar] (64) NULL
```

```
[WakeUpType] [int] NULL
This column added December 2023, possible values:
1
     Other Event
2
     Not used
    APM timer
3
4
    Modem Ring
5
    LAN Remote
6
    Power Switch
7
    PCI PME# signal
     AC Power Restored
```

Primary Key definition:

CONSTRAINT [COMPUTERNAME_MACHINEGUID_GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC, [MachineGUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE DUP KEY = ON)

CREATE INDEX I CMG ON INVENTORY (ComputerName, MachineGUID)

Table: INVENTORY_RAM

The INVENTORY_RAM table provides the list of RAM modules installed for the identified Computer + MachineGUID.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[RAMBankNumber] [int] NULL

Value is number 1 through 16

[RAMBankDescription] [varchar](512) NULL

Primary Key definition:
CONSTRAINT [RAM_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)
```

CREATE INDEX I CMG ON INVENTORY RAM (ComputerName, MachineGUID)

Table: INVENTORY_CPU

The INVENTORY_CPU table provides the list of CPUs installed for the identified Computer + MachineGUID.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[CPUNumber] [int] NULL
Value is number 1 through 16

[CPUVendor] [varchar](64) NULL

[CPUType] [varchar](64) NULL

[CPUSpeed] [varchar](64) NULL

Primary Key definition:
CONSTRAINT [CPU_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue
(IGNORE_DUP_KEY = ON)

CREATE INDEX I_CMG ON INVENTORY_CPU (ComputerName, MachineGUID)
```

Table: INVENTORY_VIDEO

The INVENTORY_VIDEO table provides the list of Video Adapters installed for the identified Computer + MachineGUID.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[VideoAdapterNumber] [int] NULL
Value is number 1 through 4

[VideoAdapterName] [varchar](128) NULL
```

```
[VideoAdapterVer] [varchar](64) NULL

[VideoAdapterDate] [varchar](64) NULL

Primary Key definition:
   CONSTRAINT [VIDEO_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)

CREATE INDEX I_CMG ON INVENTORY_VIDEO (ComputerName, MachineGUID)
```

Table: INVENTORY_MONITOR

The INVENTORY_MONITOR table provides the list of Video Monitors installed for the identified Computer + MachineGUID.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[MonitorNumber] [int] NULL
Value is number 1 through 8

[MonitorResolution] [varchar](128) NULL

Primary Key definition:
CONSTRAINT [MONITOR_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)
CREATE INDEX I CMG ON INVENTORY MONITOR (ComputerName, MachineGUID)
```

Table: INVENTORY_VOLUME

The INVENTORY_VOLUME table provides the list of Disk Drive Volumes (those with a drive letter assigned) installed for the identified Computer + MachineGUID.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[DriveLetter] [varchar] (10) NULL

Sample value : "C:\"

[VolumeName] [varchar] (32) NULL

[VolumeFormat] [varchar] (32) NULL

[VolumeSizeBytes] [varchar] (64) NULL

Primary Key definition:

CONSTRAINT [VOLUME_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)

CREATE INDEX I CMG ON INVENTORY VOLUME (ComputerName, MachineGUID)
```

Table: INVENTORY_HDD

The INVENTORY_HDD table provides the list of Physical Disk Devices installed for the identified Computer + MachineGUID.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[Manufacturer] [varchar](32) NULL

[Model] [varchar](32) NULL

[SizeBytes] [bigint] NULL
Note: overall size in bytes, does not indicate space in use

Primary Key definition:
CONSTRAINT [HDD_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)
```

Table: INVENTORY_NETWORK

The INVENTORY_NETWORK table provides the list of Physical Network Adapters installed for the identified Computer + MachineGUID.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[AdapterName] [varchar] (80) NULL

[AdapterMACAddress] [varchar] (32) NULL

Primary Key definition:

CONSTRAINT [NETWORK_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)

CREATE INDEX I CMG ON INVENTORY NETWORK (ComputerName, MachineGUID)
```

Table: INVENTORY PRINTER

The INVENTORY_PRINTER table provides the list of Printers installed for the identified Computer + MachineGUID.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[PrinterName] [varchar](32) NULL

[DriverName] [varchar](32) NULL

[DriverVersion] [varchar](32) NULL

[IPAddressAndPort] [varchar](32) NULL
```

Primary Key definition:

CONSTRAINT [PRINTER GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE DUP KEY = ON)

CREATE INDEX I CMG ON INVENTORY PRINTER (ComputerName, MachineGUID)

Table: INVENTORY_MSKEYS

The INVENTORY_MSKEYS table provides the list of Microsoft® Installation Keys detected for the identified Computer + MachineGUID.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[ApplicationName] [varchar] (128) NOT NULL

[ApplicationVersion] [varchar] (128) NULL

[InstallationKey] [varchar] (128) NULL

Primary Key definition:

CONSTRAINT [MSKEYS_GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE_DUP_KEY = ON)

CREATE INDEX I CMG ON INVENTORY MSKEYS (ComputerName, MachineGUID)
```

Table: INVENTORY_APP

The INVENTORY_APP table provides the list of installed Applications detected for the identified Computer + MachineGUID.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
```

```
[ComputerName] [varchar] (64) NOT NULL
[MachineGUID] [varchar] (128) NOT NULL
[ApplicationName] [varchar] (80) NOT NULL
[Version] [varchar] (20) NULL
[Publisher] [varchar] (80) NULL
[InstallDate] [varchar] (20) NULL
[InstallMethod] [varchar] (32) NULL
Values: MSI, EXE, InstallShield
[SerialNumber] [varchar] (80) NULL
[EstimatedSize] [varchar] (32) NULL
[EXECount] [int] NULL
Primary Key definition:
CONSTRAINT [APPNAME GUID] PRIMARY KEY CLUSTERED ([GUID] ASC, [ApplicationName] ASC,
[ComputerName] ASC, [MachineGUID] ASC)
During record inseration, if any duplicates are presented, each will be ignored and
the insertion of non-redundant records will be allowed to continue
(IGNORE DUP KEY = ON)
CREATE INDEX I CMG ON INVENTORY APP (ComputerName, MachineGUID)
CREATE INDEX I PUBLISHER ON INVENTORY APP (Publisher)
```

Table: INVENTORY_APP_TAGS

The INVENTORY_APP_TAGS table is *ONLY* created in the SOFTRACK_ENTITY_DEFAULT Database. Values in this table are customer defined, indicating the Applications with an identified Software Category.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ApplicationName] [varchar](200) NOT NULL

Duplicates not allowed, each ApplicationName value will exist once

[Entity] [varchar](80) NOT NULL

Value is not currently used for matching Application to Entity, alwaya set to:
[ALL ENTITIES]

[SoftwareCategory] [varchar](80) NOT NULL

Note: Each ApplicationName can only have one SoftwareCategory

Primary Key definition:
```

```
CONSTRAINT [APPTAG_GUID] PRIMARY KEY CLUSTERED ([ApplicationName] ASC, [Entity] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE DUP KEY = ON)
```

Table: INVENTORY_WCU

The INVENTORY_WCU table provides the list of Windows Component Updates (hotfixes) installed for the identified Computer + MachineGUID. This table was added in December 2023 and requires ST SLAM v7.03g or later to be populated.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar] (64) NOT NULL
[MachineGUID] [varchar] (128) NOT NULL
[KB] [varchar] (16) NULL
[Description] [varchar] (192) NULL
[InstallLocalTime] [datetime] NOT NULL
[Operation] [int] NOT NULL
Values:
  Installation
     Uninstallation
[Status] [int] NOT NULL
Values:
1 In Progress
    Succeeded
3
     Succeeded with Errors
4
    Failed
     Aborted
Primary Key definition:
CONSTRAINT [WCU GUID] PRIMARY KEY CLUSTERED ([GUID] ASC)
CREATE INDEX I CMG ON INVENTORY WCU (ComputerName, MachineGUID)
```

Table: INVENTORY_CLOUD_JOIN

The INVENTORY_CLOUD_JOIN table provides the of Azure (EntraID) Tenants joined for the identified Computer + MachineGUID. This table was added in December 2023 and requires ST SLAM v7.03g or later to be populated.

The following are the columns defined, in the order of creation including specifics of each definition. After all columns definitions are detailed, the primary key and other configurations are provided.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[DeviceDisplayName] [varchar] (64) NOT NULL

Note: This value is typically identical to the ComputerName column

[TenantID] [varchar] (64) NOT NULL

[UserEmail] [varchar] (256) NOT NULL

Note: This value is the UserPrincipalName as identified in Azure (EntraID)

Primary Key definition:

CONSTRAINT [CLOUD_JOIN_GUID] PRIMARY KEY CLUSTERED ([TenantID] ASC,
[DeviceDisplayName] ASC, [UserEmail] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue

(IGNORE_DUP_KEY = ON)

CREATE INDEX I_CMG ON INVENTORY_CLOUD_JOIN (ComputerName, MachineGUID)
```

Table: ALL_SOFTWARE_USAGE

The ALL SOFTWARE USE table includes all imported or usage detected by the ST SLAM agent.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[PID] [int] NOT NULL

Note: PID=ProcessID, this value is internal to Windows® and is used to uniquely identify usage; if this record was Imported, the value will be zero

[RecordType] [int] NULL

Value 48=ST_SLAM Record; 80=Smart Inventory Import Record
Note: Record Type = 80 will only have the following columns: ComputerName,
MachineGUID with value of NO_MGUID, Username, EXEStartTime, EXEAppName, EXEVersion,
EXECompany and EXEName)

[Username] [varchar](64) NULL
```

```
[EXEName] [varchar] (270) NOT NULL
[EXEFullPath] [varchar] (2700) NULL
[EXECompany] [varchar] (64) NULL
[EXEVersion] [varchar] (64) NULL
[EXEDescription] [varchar] (64) NULL
[EXEProductName] [varchar] (64) NULL
[EXEAppName] [varchar] (512) NULL
[EXEStartTime] [datetime] NOT NULL
[EXEExitTime] [datetime] NULL
[ActiveSeconds] [int] NULL
[IdleSeconds] [int] NULL
[TotalSeconds] [int] NULL
[TimeZoneBiasSeconds] [int] NULL
Value is negative or positive number of seconds bias from UTC
[EXEStartTimeUTC] [datetime] NULL
[EXEExitTimeUTC] [datetime] NULL
[TSSession] [int] NULL
Note: This value is not currently used, it is planned for the future
Primary Key definition:
CONSTRAINT [ALL SOFTWARE USAGE GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC,
[MachineGUID] ASC, [PID] ASC, [EXEName] ASC, [EXEStartTime] ASC)
During record inseration, if any duplicates are presented, each will be ignored and
the insertion of non-redundant records will be allowed to continue
(IGNORE DUP KEY = ON)
```

Table: ALL_PAGE_TITLE_ACTIVITY

The ALL_PAGE_TITLE_ACTIVITY table provides record of all Page Titles a user viewed during their entire logon session.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL
```

```
[RecordType] [int] NOT NULL
Value 81=ST SLAM Record
[TSSession] [int] NOT NULL
Session Id for the specific usage, this value is internal to Windows®
[PID] [int] NOT NULL
Note: PID=ProcessID, this value is internal to Windows® and is used to uniquely
identify usage
[Username] [varchar] (64) NOT NULL
[PageTitle] [varchar] (260) NOT NULL
Value is the title of the application window that is the current focus
[EXEName] [varchar] (260) NOT NULL
[EXEStartTime] [datetime] NOT NULL
[PageViewStartTime] [datetime] NOT NULL
[PageViewExitTime] [datetime] NOT NULL
[ActiveSeconds] [int] NOT NULL
Primary Key definition:
CONSTRAINT [ALL PAGE TITLE ACTIVITY GUID] PRIMARY KEY CLUSTERED ([ComputerName]
ASC, [MachineGUID] ASC, [PID] ASC, [EXEName] ASC, [EXEStartTime] ASC,
[PageViewStartTime] ASC)
During record inseration, if any duplicates are presented, each will be ignored and
the insertion of non-redundant records will be allowed to continue
(IGNORE DUP KEY = ON)
```

Table: DIGITAL CERTIFICATE EXCEPTIONS

The DIGITAL_CERTIFICATE_EXCEPTIONS table includes all application usage detected by the ST_SLAM agent with an invalid/cracked Digital Certificate Signature or has never been signed (no Digital Certificate Signature).

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[DCertExceptionCode] [int] NOT NULL

[DCertCompany] [varchar] (192) NULL

[DCertIssuer] [varchar] (192) NULL
```

```
[Username] [varchar] (64) NULL
[EXEName] [varchar] (270) NOT NULL
[EXEFullPath] [varchar] (2700) NULL
[EXECompany] [varchar] (64) NULL
[EXEVersion] [varchar] (64) NULL
[EXEDescription] [varchar] (64) NULL
[EXEProductName] [varchar] (64) NULL
[EXEAppName] [varchar] (512) NULL
[EXELastModifyTime] [datetime] NOT NULL
[EXEFileSize] [int] NOT NULL
[TimeZoneBiasSeconds] [int] NULL
Value is negative or positive number of seconds bias from UTC
[EXELastUsageTime] [datetime] NULL
Primary Key definition:
CONSTRAINT [DIGITAL CERTIFICATE EXCEPTIONS GUID] PRIMARY KEY CLUSTERED
([ComputerName] ASC, [MachineGUID] ASC, [DCertExceptionCode] ASC, [EXEName] ASC,
[EXEFullPath] ASC, [EXELastModifyTime] ASC, [EXEFileSize] ASC)
(IGNORE DUP KEY = ON)
During record inseration, if any duplicates are presented only the column
[EXELastUsageTime], will be updated (thus, only a single row for this entry always
maintained with the latest/most recent usage time).
```

Table: WERFAULT_HISTORY

The WERFAULT_HISTORY table includes all crashed application usage handled by Windows® WERFAULT detected by the ST SLAM.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[PIDThatCrashed] [int] NOT NULL

[WerfaultPath] [varchar] (270) NULL

This is the path WERFAULT.EXE was launched from.

[Username] [varchar] (64) NULL
```

```
[EXEName] [varchar] (270) NOT NULL
[EXEFullPath] [varchar] (2700) NULL
[EXECompany] [varchar] (64) NULL
[EXEVersion] [varchar] (64) NULL
[EXEDescription] [varchar] (64) NULL
[EXEProductName] [varchar] (64) NULL
[EXEAppName] [varchar] (512) NULL
[EXEStartTime] [datetime] NOT NULL
[EXECrashTime] [datetime] NOT NULL
[TimeZoneBiasSeconds] [int] NULL
Value is negative or positive number of seconds bias from UTC
[EXEStartTimeUTC] [datetime] NULL
[EXEExitTimeUTC] [datetime] NULL
[TSSession] [int] NULL
Note: This value is not currently used, it is planned for the future
Primary Key definition:
CONSTRAINT [WERFAULT HISTORY GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC,
[MachineGUID] ASC, [PIDThatCrashed] ASC, [EXEName] ASC, [EXEStartTime] ASC,
[EXECrashTime] ASC)
(IGNORE DUP KEY = ON)
```

Table: BSOD HISTORY

The BSOD_HISTORY table includes details of the MEMORY.DMP file that occurs when a workstation crashes (also known as a BSOD) detected by the ST SLAM.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[DateOfDumpFile] [datetime] NOT NULL

[DumpFileSize] [bigint] NOT NULL

[BugCheckCode] [int] NOT NULL

[Param1] [bigint] NOT NULL
```

Param columns are from the crash dump, each are included for completeness.

```
[Param2] [bigint] NOT NULL

[Param4] [bigint] NOT NULL

[OtherData] [varchar] (2700) NULL

Note: This value is not currently used, it is planned for the future

Primary Key definition:
CONSTRAINT [CONSTRAINT [BSOD_HISTORY_GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC, [MachineGUID] ASC, [DateOfDumpFile] ASC, [BugCheckCode] ASC)
(IGNORE DUP KEY = ON)
```

Table: SQL SERVER ACTIVITY

The SQL_SERVER_ACTIVITY table provides detail of user SQL sessions. If a SQL Session includes multiple dates, the SQLLoginDate column will reveal the initial session start and the SQLActiveOnDate will present subsequent dates. For instance, if a session extended for 7 days, there will be 7 records (rows) and the only difference for each record will be the SQLActiveOnDate value.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar] (64) NOT NULL
[MachineGUID] [varchar] (128) NOT NULL
[RecordType] [int] NOT NULL
Value 68=SQL Session Record;
[SQLInstance] [varchar] (128) NOT NULL
Value is only SQL Instance name such as "SQLEXPRESS", maximum name length per
SOL Server is 16 characters
[SQLLoginDate] [date] NOT NULL
Example: 2020-11-15 is November 15, 2020
[SQLActiveOnDate] [date] NOT NULL
[SQLLoginName] [varchar] (128) NOT NULL
Example: DOMAIN\USER
[NTUserName] [varchar] (128) NULL
[NTDomainName] [varchar] (128) NULL
[LDAPUserName] [varchar] (512) NULL
If available, the LDAP name will be included
```

```
[ConnectionMethod] [varchar](128) NULL
Example: ODBC, .Net SqlClient Data Provider, etc.

[ApplicationName] [varchar](128) NULL
If known, will be the application requesting the SQL session

[DatabaseConnected] [varchar](128) NOT NULL
Name of the SQL Table accessed by the session

Primary Key definition:
CONSTRAINT [SQL_SERVER_ACTIVITY_GUID] PRIMARY KEY CLUSTERED ([ComputerName]
ASC, [MachineGUID] ASC, [SQLInstance] ASC, [SQLLoginDate] ASC,
[SQLActiveOnDate] ASC, [SQLLoginName] ASC, [DatabaseConnected] ASC,
[RecordType] ASC)

During record inseration, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue
(IGNORE DUP KEY = ON)
```

Table: ALL_LOGON_ACTIVITY

The ALL LOGON ACTIVITY table provides detail of each user Logon Session.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[RecordType] [int] NOT NULL

Value 193: Logon Session; 200: Lock/Unlock Activity

[TSSession] [int] NULL

[PID] [int] NOT NULL

[Username] [varchar](64) NOT NULL

[Domain] [varchar](64) NULL

[LDAPUserName] [varchar](512) NULL

[RemoteAddress] [varchar](64) NULL

[SessionStation] [varchar](64) NOT NULL

[LoginTime] [datetime] NOT NULL

[LogoffTime] [datetime] NULL

Note: Will be NULL for Lock/Unlock record type
```

```
[LockTime] [datetime] NULL
```

[UnlockTime] [datetime] NULL

[TotalLockedSeconds] [int] NULL

[TotalLoginSeconds] [int] NULL

[TimeZoneBiasSeconds] [int] NULL

[SyncTime] [datetime] NOT NULL

Primary Key definition:

CONSTRAINT [ALL_LOGON_LOCK_ACTIVITY_GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC, [MachineGUID] ASC, [PID] ASC, [LoginTime] ASC, [RecordType] ASC, [SyncTime] ASC)

During record insertion, if any duplicates are presented, each will be ignored and the insertion of non-redundant records will be allowed to continue (IGNORE DUP KEY = ON)

Table: ADESK_USAGE

The ADESK USAGE table stores details of each Autodesk® Application Usage per workstation.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar] (64) NOT NULL
[MachineGUID] [varchar] (128) NOT NULL
[PID] [int] NOT NULL
[RecordType] [int] NOT NULL
Value 173: Autodesk® Activity
[Username] [varchar] (64) NULL
[EXEName] [varchar] (270) NOT NULL
[EXEFullPath] [varchar] (2700) NULL
[EXECompany] [varchar] (64) NULL
[EXEVersion] [varchar] (64) NULL
[EXEDescription] [varchar] (64) NULL
[EXEProductName] [varchar] (64) NULL
[EXEAppName] [varchar] (512) NULL
[EXEStartTime] [datetime] NOT NULL
[EXEExitTime] [datetime] NULL
[ActiveSeconds] [int] NULL
[IdleSeconds] [int] NULL
[TotalSeconds] [int] NULL
[TimeZoneBiasSeconds] [int] NULL
Value is negative or positive number of seconds bias from UTC
[EXEStartTimeUTC] [datetime] NULL
[EXEExitTimeUTC] [datetime] NULL
[TSSession] [int] NULL
Note: This value is not currently used, it is planned for the future
[AD LicenseInfoAuthorized] [tinyint] NULL
Value is boolean, true or false
[AD LicenseInfoMethod] [smallint] NULL
[AD LicenseInfoSerialNumber] [varchar] (16) NULL
[AD LicenseInfoLicenseModel] [smallint] NULL
```

```
[AD LicenseInfoLicenseSubModel] [varchar] (24) NULL
[AD LicenseInfoLicenseBehavior] [smallint] NULL
[AD LicenseInfoUsage] [smallint] NULL
[AD LicenseInfoExpState] [smallint] NULL
[AD LicenseInfoExpDate] [date] NULL
[AD LicenseInfoType] [smallint] NULL
[AD LicenseInfoState] [smallint] NULL
[AD LicenseInfoFeatureName] [varchar] (32) NULL
[AD LicenseInfoLicenseName] [varchar] (48) NULL
[AD LicenseInfoFeatureID] [varchar] (16) NULL
[AD LicenseInfoFeatureVer] [varchar] (16) NULL
[AD LicenseinfoUserID] [varchar] (16) NULL
[AD LicenseinfoUsername] [varchar] (64) NULL
[AD DaysActive] [smallint] NULL
Value 0: less than 1 day; otherwise [TotalSeconds] / 86400
Primary Key definition:
CONSTRAINT [ADESK USAGE GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC,
[MachineGUID] ASC, [PID] ASC, [EXEName] ASC, [EXEStartTime] ASC)
```

Table: ADESK PLUGINS

The ADESK_PLUGINS table stores details of each Autodesk® Plugin that was Loaded into Any AutoCAD Application.

```
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar](64) NOT NULL

[MachineGUID] [varchar](128) NOT NULL

[PID] [int] NOT NULL

[RecordType] [int] NOT NULL

Value 116: Autodesk® Plugin Usage

[Username] [varchar](64) NULL

[EXEName] [varchar](270) NOT NULL

[EXEFullPath] [varchar](2700) NULL

[EXECompany] [varchar](64) NULL
```

```
[EXEVersion] [varchar] (64) NULL
[EXEDescription] [varchar] (64) NULL
[EXEProductName] [varchar] (64) NULL
[EXEAppName] [varchar] (512) NULL
[EXEStartTime] [datetime] NOT NULL
[EXEExitTime] [datetime] NULL
[ActiveSeconds] [int] NULL
[IdleSeconds] [int] NULL
[TotalSeconds] [int] NULL
[TimeZoneBiasSeconds] [int] NULL
Value is negative or positive number of seconds bias from UTC
[EXEStartTimeUTC] [datetime] NULL
[EXEExitTimeUTC] [datetime] NULL
[TSSession] [int] NULL
Note: This value is not currently used, it is planned for the future
[AD PluginFilename] [varchar] (260) NOT NULL
[AD PluginDescription] [varchar] (260) NULL
[AD PluginVersion] [varchar] (32) NULL
[AD PluginCompany] [varchar] (128) NULL
[AD PluginPathSize] [bigint] NULL
[AD PluginInstallationDate] [datetime] NULL
Primary Key definition:
CONSTRAINT [ADESK PLUGINS GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC,
[MachineGUID] ASC, [PID] ASC, [EXEName] ASC, [EXEStartTime] ASC,
[AD PluginFilename] ASC)
```

Table: ACROBAT_DC_LAST_LOGON

The ACROBAT_DC_LASTLOGON table stores 2 types of records that are closely related for Acrobat Document Cloud (DC) activity discovered at each worktation. Record type 426 is the current status and Record type 427 contains all prior status to provide the basis of Acrobat Cloud Logon history.

[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[RecordType] [int] NOT NULL

Value 426: Latest statistics for named computer + user, one row only for each Value 427: Same as 426, but uses the LatestCCLogon value as a unique identifier to maintain a history of all Acrobat Document Cloud logons and statistics at the time recorded; no limit to the number of rows per computer + user

[WhenRecorded] [datetime] NOT NULL

Local workstation time of when the statistics herein were gathered

[InstallationTime] [datetime] NOT NULL

Time Acrobat was installed on the workstation (not user specific), time is based on the creation time of the [InstallationPath]

[InstallationPath] [varchar] (260) NOT NULL

Folder path of Acrobat installation

[LocalUsername] [varchar] (260) NOT NULL

[EmailUsername] [varchar] (260) NULL

Email address used to logon to Adobe Acrobat Document Cloud

[AcrobatLicenseInUse] [varchar] (16) NULL

Will be a value such as Standard, Pro, or Reader, can also be blank or none or other values specific to the logon

[LatestAcrobatUsageTime] [datetime] NULL

A general usage time signifying when any type of Acrobat activity most recently occurred, the value set is based on local workstation time Value can be blank, this is indicated by a NULL value

[LatestCCLogon] [datetime] NOT NULL

If there has been no Adobe Document Cloud logon the value will be set to: '2000-01-01 00:00' to indicate not set, a value is necessary because this column is part of the primary key construction and cannot be null; otherwise, the value set is based on local workstation time

[TimesLaunched] [int] NOT NULL

This value indicates the number of times Acrobat has been launched

[LocationCountry] [varchar] (4) NULL

This value indicates the country code (i.e. 'US', 'AU', 'DE', 'ZA', etc) of the computer at the time of the most recent Acrobat Document Cloud logon

[EntitlementType] [varchar] (32) NULL

SofTrack Managed Assets Administrator Guide

This value indicates the type of Entitlement, will be 'NOVALUE' is there has been no recent (or any) Acrobat Document Cloud Logon and typically the value will be 'SUBSCRIPTION'

[EntitlementLevel] [int] NOT NULL

This value has 2 defined values: 200=Standard, 300=Pro

Other values such as 0,1,2,3 can occur but do not indicate an actual current Entitlement

[CurrentlyEntitled] [int] NOT NULL

This value will be 0 (zero) if not and (1) if entitled, -1 = undefined entitlement

[EntitlementVerified] [datetime] NULL

This value indicates the local workstation time that Adobe Cloud verified Entitlement. Value can be blank, this is indicated by a NULL value

[AdvancedESignUser] [int] NOT NULL

This value identifies if Advanced E-Sign entitlement is indicated, if not found, value will be -1

[LatestDistillerUsage] [datetime] NULL

This value indicates the local workstation time of the most recent use of Distiller by Acrobat or any application configured to print to Distiller Value can be blank, this is indicated by a NULL value

[NumberDistillerPDFs] [int] NOT NULL

This value indicates the number of PDFs created via Distiller, this value may not represent all PDFs ever created via Distiller

[NumberDistillerEXEUsing] [int] NOT NULL

This value indicates the number of applications (i.e. Outlook, PowerPoint, etc.) that has been using Distiller to create PDFs

[LatestEditToolsUsage] [datetime] NULL

This value indicates the local workstation time of the most recent use of any Acrobat Editing tool. Value can be blank, this is indicated by a NULL value.

The complete list of Editing tools used on the selected computer + user is found in the Table:

ACROBAT DC TOOLS USAGE

This Table is defined later in this Chapter.

[NumberEditToolsUsed] [int] NOT NULL

This value indicates the total number of recently used Acrobat Editing Tools

[LatestCompoundDocsUsage] [datetime] NULL

This value indicates the local workstation time of the most recent use of Acrobat Compound Documents

Value can be blank, this is indicated by a NULL value

Compound Documents: PDFs resulting from the combining or merging of multiple files into a single PDF, including 'Adobe Portfolio' files

[NumberCompoundDocBinders] [int] NOT NULL

This value indicates the total number of recently edited Compound Documents, will be 0 (zero) if none found

Compound Documents: PDFs resulting from the combining or merging of multiple files into a single PDF, including 'Adobe Portfolio' files

[LatestPDFMakerUsage] [datetime] NULL

This value indicates the local workstation time of the most recent use of PDFMaker by any application configured to utilized. Value can be blank, this is indicated by a NULL value

[NumberPDFMakerEXEUsing] [int] NOT NULL

This value indicates the number of application (Outlook, etc) configured to use PDFMaker

[LatestEditCreateModifyUsage] [datetime] NULL

Value can be blank, this is indicated by a NULL value

Primary Key definition:

CONSTRAINT [ACROBAT_DC_LAST_LOGON_GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC, [MachineGUID] ASC, [RecordType] ASC, [LocalUsername] ASC, [LatestCCLogon] ASC)

Table: ACROBAT_DC_TOOLS_USAGE

The ACROBAT_DC_TOOLS_USAGE table stores details of each recently used Acrobat Editing Tool per computer + user including number of times each tool was used and most recent date of usage

[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()

[ComputerName] [varchar] (64) NOT NULL

[MachineGUID] [varchar] (128) NOT NULL

[RecordType] [int] NOT NULL

Value 423: Latest statistics for named computer + user + tool, one row only for each

[WhenRecorded] [datetime] NOT NULL

Local workstation time of when the statistics herein were gathered

[LocalUsername] [varchar] (260) NOT NULL

[EmailUsername] [varchar] (260) NOT NULL

Email address used to logon to Adobe Acrobat Document Cloud

[ToolName] [varchar] (64) NOT NULL

[NumberUsages] [int] NOT NULL

[LatestToolUsage] [datetime] NOT NULL

Local workstation time of latest usage of named Tool

Primary Key definition:

CONSTRAINT [ACROBAT_DC_TOOLS_USAGE_GUID] PRIMARY KEY CLUSTERED ([ComputerName] ASC, [MachineGUID] ASC, [RecordType] ASC, [LocalUsername] ASC, [EmailUsername] ASC, [ToolName] ASC)

Table: TCPUDP STATS

```
activity where the number of bytes uploaded or downloaded
[GUID] [uniqueIdentifier] NOT NULL DEFAULT NEWSEQUENTIALID()
[ComputerName] [varchar] (64) NOT NULL
[MachineGUID] [varchar] (128) NOT NULL
[PID] [int] NOT NULL
[RecordType] [int] NOT NULL
Value 65: TCP/UDP Upload/Download Statistics
[Username] [varchar] (64) NULL
[EXEName] [varchar] (270) NOT NULL
[TSSession] [int] NULL
Note: This value is not currently used, it is planned for the future
[TotalSecondsConnected] [int] NOT NULL
Value is total number of seconds connected to specified Port
[ConnectionStartTime] [datetime] NOT NULL
[ConnectionExitTime] [datetime] NOT NULL
[IsUDPPort] [tinyint] NULL
Value is boolean, true or false
[RemoteIPv4Address] [varchar] (16) NOT NULL
If IPv6 address is found, value set to last 4 bytes of IPv6 addres
[RemoteIPv6Address] [varchar] (40) NULL
[RemoteHostName] [varchar] (258) NULL
If resolvable, otherwise will be same as RemoteIPv4Address
[RemotePort] [int] NOT NULL
[DownloadedSizeBytes] [bigint] NULL
[UploadedSizeBytes] [bigint] NULL
Primary Key definition:
CONSTRAINT [TCPUDP USAGE GUID] PRIMARY KEY CLUSTERED ([ComputerName]
ASC, [MachineGUID] ASC, [PID] ASC, [EXEName] ASC, [ConnectionStartTime]
ASC, [RemoteIPv4Address] ASC, [RemotePort] ASC)
```

The TCPUDP STATS table stores details of all upload and/or download

Table: SOFTRACK_DB_Dates

This table is currently unused; it is included for possible future reporting options.

Stored Procedures

Four Stored Procedures are created in the SOFTRACK ENTITY DEFAULT table.

ADESK_R30

ADESK R30S

TCPUDP_T30

TCPUDP T33



Audit

To gather information about an application for tracking, trend analysis, and usage enforcement.

Interactive Reports

Reports produced from the SOFTRACK CONSOLE.EXE interface.

SOFTRACK CONSOLE.EXE

The administrator and reporting interface for SofTrack.

SSA

See SofTrack Server Agent.

Token

An activation file for the SofTrack program. A time-limited evaluation token is supplied with the evaluation version of SofTrack. It may be replaced at any time with a purchased token. Without a token, SofTrack will not function except to provide reporting of previously gathered activity.