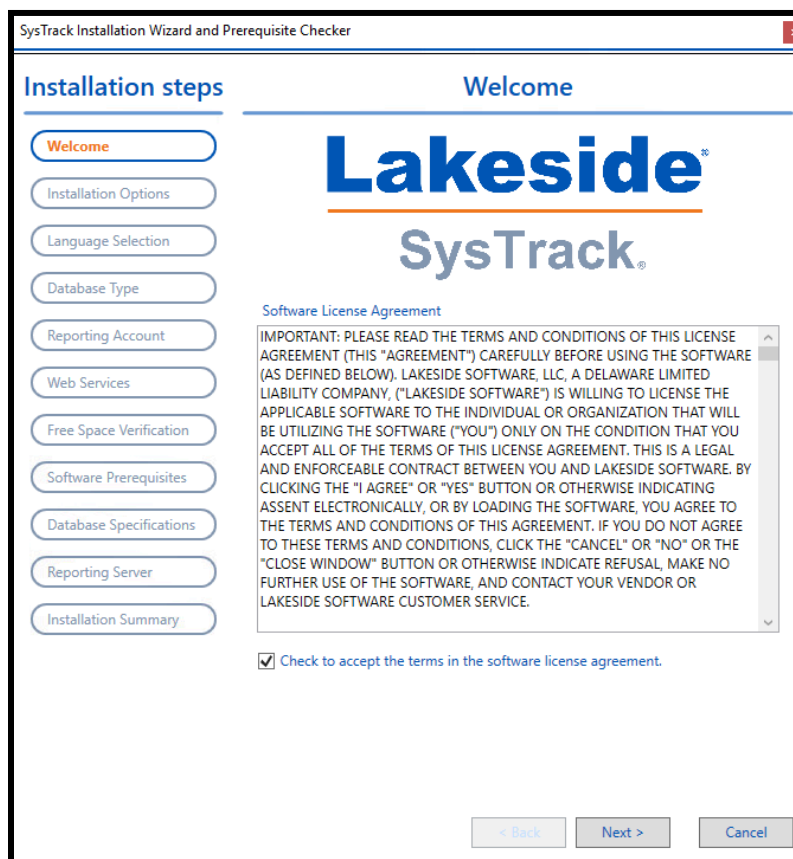


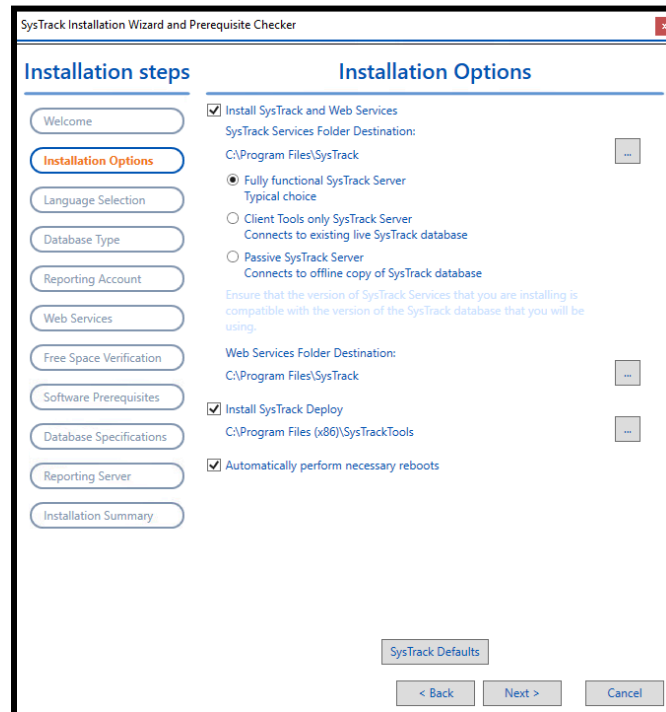
Master Server Installation

Steps:

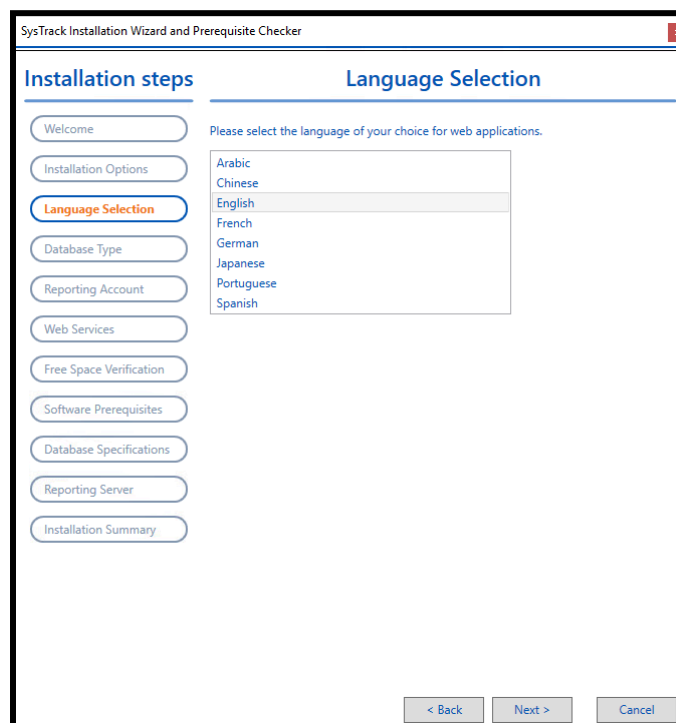
- 1) **Download** the provided Installation Package from <https://www.lakesidesoftware.com/product-briefs/introducing-systrack-90/>
- 2) **Extract** the installation files to a location on your SysTrack Master System.
- 3) Right-click the Setup application and select **Run as administrator** from the resulting menu.
- 4) A prompt may require a system restart before continuing the installation.
- 5) The installer should start back up automatically when the user logs back in.
- 6) In the **Welcome** tab, **mark the checkbox** to accept the terms in the Software License Agreement and click **Next**.



- 7) In the **Installation Options** tab, there are several installation options to choose from. So select the **default settings** as in the following image and click **Next**.



- 8) In **Language Selection** tab, select the language (**English**) to be used for SysTrack web-based applications and click **Next**.



- 9) In **Database Type** tab, if we have an **existing SQL Server database** which has been configured prior to the SysTrack installation then select **Connect to existing SQL Server** to allow SysTrack services to connect the database or use an existing SQL Server database to install **SQL Server Express**. Create a strong password and write it in **SQL Server Express SA account password** and also in **Confirm SQL Server Express SA account password** and click **Next**.

The screenshot shows the 'Database Type' tab of the SysTrack Installation Wizard. On the left, a vertical list of installation steps includes 'Database Type' as the current step. The main area is titled 'Choose type of SQL Server' and offers two options: 'Connect to existing SQL Server' (unselected) and 'SQL Server Express' (selected). Below the 'SQL Server Express' option, there is a detailed description of its limitations. Two password fields are present: 'SQL Server Express SA account password' and 'Confirm SQL Server Express SA account password', both masked with dots. A password strength note specifies requirements: at least 8 characters, no current user or system names, and at least three of uppercase, lowercase, numbers, or non-alphanumeric characters. At the bottom, there are fields for 'Location for database data storage' and 'Installation location for SQL Server Management Studio', both with a file explorer icon and a 'Default' button. Navigation buttons '< Back', 'Next >', and 'Cancel' are at the bottom right.

- 10) In **Reporting Account** tab, enter a **Windows Domain Account** and **Username** in the following format: **domain\user** then enter a **Password** and click on **Test Credentials** for verifying and click **Next**.

The screenshot shows the 'Reporting Account' tab of the SysTrack Installation Wizard. The left sidebar shows 'Reporting Account' as the current step. The main area contains instructions to enter domain user account credentials. A 'Reporting user format' is shown as '<domain>\<user>'. The 'Reporting User' field contains 'LSLAB\SA-SSRSReportUser' and the 'Password' field is masked with dots. A 'Test Credentials' button is located below the password field. A status message at the bottom states 'Your Reporting User credentials are valid'. Navigation buttons '< Back', 'Next >', and 'Cancel' are at the bottom right.

11) In **Web Services** tab, in the **Web Services logging path** keep the default path (**C:\Logs**) or enter a different path.

In **IIS TLS Configuration**, select any one radio button:

- Select the first option if a **trusted certificate has already been created and installed on the local machine**.
- Select the second option to create a **self-signed certificate**.

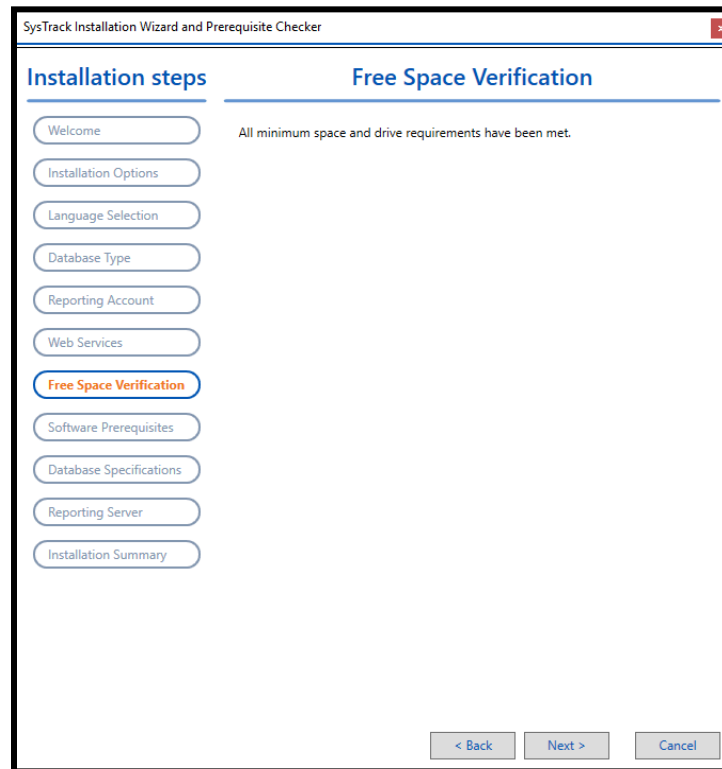
To maintain STIG compliance when selecting either of the IIS TLS Configuration options, we must complete the **Web Services Host Name** field and enter the **Web Services IP followed by :443** in the **Web Services IP** field and click **Next**.

The screenshot shows the 'Web Services' tab of the 'SysTrack Installation Wizard and Prerequisite Checker'. On the left is a vertical sidebar with buttons for 'Welcome', 'Installation Options', 'Language Selection', 'Database Type', 'Reporting Account', 'Web Services' (highlighted in orange), 'Free Space Verification', 'Software Prerequisites', 'Database Specifications', 'Reporting Server', and 'Installation Summary'. The main area is titled 'Web Services' and contains the following sections:

- A checkbox labeled 'Make the SysTrack Launch page the default server page for Visualizer tools.' which is checked.
- A text field for 'Web Services logging path (Default is C:\Logs):' with the value 'C:\Logs' entered.
- Two text fields: 'Web Services Host Name:' (empty) and 'Web Services IP: <IP>:<port>' with the value '*:443' entered.
- An 'IIS TLS Configuration' section with three radio button options:
 - ☒ 'Configure IIS TLS for the SysTrack Visualizers Site by using an existing certificate from the Local Machine certificate store.'
 - ☐ 'Configure IIS TLS for the SysTrack Visualizers Site by creating, installing and configuring a new SHA256 2048-bit certificate which expires in 3 years (additional steps are required for client communication, see documentation).'
 - ☐ 'Don't make any changes. I have either already setup the certificate or I will do so manually by following the documented process to request, install and configure a certificate.'
- A 'Select Installed Certificate' section with a text field containing the certificate ID 'SysTrack Services - 3D9DDE47CD637A0658673C7979F6B873841B903A'.

At the bottom right, there are buttons for '< Back', 'Next >', and 'Cancel'. A watermark 'Activate W Go to Settings' is visible in the bottom right corner.

- 12) In **Free Space Verification** tab, wait while the space checker verifies if the system on which you are installing SysTrack has sufficient space and drive requirements. If our **space requirements are met** then click **Next**.



The screenshot shows the 'SysTrack Installation Wizard and Prerequisite Checker' window. On the left, under 'Installation steps', a list of steps is shown: Welcome, Installation Options, Language Selection, Database Type, Reporting Account, Web Services, **Free Space Verification** (highlighted with an orange border), Software Prerequisites, Database Specifications, Reporting Server, and Installation Summary. The main area is titled 'Free Space Verification' and contains the message: 'All minimum space and drive requirements have been met.' At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

If there is **insufficient space to install SysTrack** and its components, a message will display “**Free space on drive**” or “**redirect SysTrack components to a different drive that does have sufficient free space**”.



The screenshot shows the 'SysTrack Installation Wizard and Prerequisite Checker' window. On the left, under 'Installation steps', a list of steps is shown: Welcome, Installation Options, Language Selection, Database Type, Reporting Account, Web Services, **Free Space Verification** (highlighted with an orange border), Software Prerequisites, Database Specifications, Reporting Server, and Installation Summary. The main area is titled 'Free Space Verification' and contains the message: 'The free space on drive 'C:\' is insufficient for installing SysTrack and its components. The minimum required free space is '30.4 GB', but only '28.6 GB' are available. Please free up the minimum required amount of free space on drive 'C:\' or, if possible, redirect SysTrack components to a different drive that does have sufficient free space.' At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

- 13) In **Software Prerequisites** tab, the **SysTrack installation** determines which required software is already on the system and which software needs to be installed. After running the prerequisite check a list of prerequisites already installed and those that still need to be installed are displayed. If prerequisites need to be installed click **Install Prerequisites** and click **Next**.

The screenshot shows the 'SysTrack Installation Wizard and Prerequisite Checker' window. On the left, a vertical list of installation steps includes: Welcome, Installation Options, Language Selection, Database Type, Reporting Account, Web Services, Free Space Verification, **Software Prerequisites** (highlighted), Database Specifications, Reporting Server, and Installation Summary. The main area is titled 'Software Prerequisites' and is divided into two sections: 'Prerequisites already installed' and 'Prerequisites that still need to be installed'. The 'already installed' section lists 'Microsoft .NET Framework 4.6.1'. The 'still need to be installed' section lists: 'Web Server (IIS)', 'Microsoft URL Rewrite Module 2.0 for IIS (x64)', 'Microsoft Visual C++ 32-bit Runtime', 'Microsoft Visual C++ 64-bit Runtime', 'Access Database Engine 64-bit', 'Microsoft OLE DB Driver for SQL Server', 'SQL Server Management Studio', and 'SQL Server Express * **'. Below these lists, two footnotes are provided: '* A system reboot may be required before this prerequisite package installation' and '** A system reboot may be required after this prerequisite package installation'. At the bottom right, there is an 'Install Prerequisites' button. At the very bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Installation steps	Software Prerequisites
Welcome	Prerequisites already installed
Installation Options	Microsoft .NET Framework 4.6.1
Language Selection	Prerequisites that still need to be installed
Database Type	Web Server (IIS)
Reporting Account	Microsoft URL Rewrite Module 2.0 for IIS (x64)
Web Services	Microsoft Visual C++ 32-bit Runtime
Free Space Verification	Microsoft Visual C++ 64-bit Runtime
Software Prerequisites	Access Database Engine 64-bit
Database Specifications	Microsoft OLE DB Driver for SQL Server
Reporting Server	SQL Server Management Studio
Installation Summary	SQL Server Express * **

* A system reboot may be required before this prerequisite package installation
** A system reboot may be required after this prerequisite package installation

Install Prerequisites

< Back Next > Cancel

- 14) In **Database Specifications** tab, enter the name of our **GMSA** (make sure to include the dollar sign at the end) or **Windows Domain Account** in the **User** field. If we are using the **SQL Express** option, the fields will be pre-populated with default information and the login and password you provided on the **Database Type** tab. If we selected the **Connect to existing SQL Server** option then specify the **Login**, **Password** and **Database** that we created during the database preparation. Now we have to click **Test Database Connection** then **SysTrack Installation** verifies the database connection and displays a **Status Progress Table**. If any of the database specifications do not pass the test then follow the recommendations listed in the **Description** column next to the failed items shown in **Status** column and click **Next**.

The screenshot shows the 'SysTrack Installation Wizard and Prerequisite Checker' window. The 'Database Specifications' tab is active. On the left, a vertical list of steps includes: Welcome, Installation Options, Language Selection, Database Type, Reporting Account, Web Services, Free Space Verification, Software Prerequisites, **Database Specifications** (highlighted), Reporting Server, and Installation Summary. The main area contains the following fields and options:

- Windows Authentication:**
 - ☒ Group Managed Service Account (GMSA - Best Practice)
 - ☐ Windows Domain Account
- User:** [Text input field]
- Password:** [Text input field]
- SQL Server Database Connection Settings:**
 - Server\instance name:** [Text input field containing '.\SYSMGMT_DB']
 - Database:** [Dropdown menu showing 'SysTrack']
 - Port:** [Text input field]
- A note below the port field: 'The port number is only required when the SQL Server Browser service is disabled.'
- Test Database Connection:** [Button]

At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'.

15) In **Reporting Server** tab, if we are using a SQL Report Server then we need to set up our report server and ensure that it is working correctly.

So choose from one of the following:

- Select **Enter individual components to create a Report Server URL** option and then complete the information for each field for this option.
- If we know our report server's URL, select **Enter a Report Server URL** option and then enter the URL in the provided field.
- Enter an optional **SSRS configuration user account** to be used as a reporting account for a successful connection test to the report server and enter the **password**.
- Enter a **windows domain user** or **group account** to the SSRS Content Manager role in the Group or user name field.
- Then click **Test Report Server URL** to verify the connection and click **Next**.

A **SQL Report Server** is the central component of a **Microsoft SQL Server Reporting Services (SSRS)** installation. Using a SQL Report Server allows you to display various reports in SysTrack applications such as **SysTrack Visualizer** and **Transform**.

SysTrack Installation Wizard and Prerequisite Checker

Installation steps

- Welcome
- Installation Options
- Language Selection
- Database Type
- Free Space Verification
- Reporting Account
- Web Services
- Software Prerequisites
- Database Specifications
- Reporting Server**
- Installation Summary

Reporting Server

☐ Skip SQL Server Report Server configuration
☒ Enter individual components to create a Report Server URL

Uses secure connection? ☒

Report Server name:
 Port number:
 Virtual directory name:
 Instance name:

☐ Enter a Report Server URL (Advanced)
 The instance name is required if SQLServer Express or Reporting Services was installed as a named instance. Port number may be omitted if default port (443 for https) is used.
 URL format: https://<servername>:<port>/<virtualdirectory>.<instancename>

Root content location (optional):
 SysTrack master server name:
 SSRS configuration user (optional):
 Password:
 Group or user name (optional):
 Enter a Windows group or domain user account to the SSRS content manager role.
 Format: <domain>\<account>

Test Report Server URL

- 16) In **Installation Summary**, click **Process Selections** to proceed with the installation and wait while the SysTrack services, Web Services and Administrative tools (SysTrack Deploy) install. The system will reboot to complete the installation.

SysTrack Installation Wizard and Prerequisite Checker

Installation steps

- Welcome
- Installation Options
- Language Selection
- Database Type
- Reporting Account
- Web Services
- Free Space Verification
- Software Prerequisites
- Database Specifications
- Reporting Server
- Installation Summary**

Installation Summary

It looks like you've chosen to use an existing SQL Server to install, upgrade or uninstall the products listed below. After the process has completed, the local server will be rebooted in order to complete the installation.

- Run SysTrack Database Prep Service
- Install SysTrack Services
- Install Web Services
- Install SysTrack Deploy

Process Selections

Dashboard

SysTrack dashboards are installed with SysTrack and provide customized views of real-time data, allowing insights into SysTrack data as well as external databases. Dashboards can display this data in a variety of formats including a grid, different types of charts, gauges and other visualizations. The user can interact with the dashboard by providing input on selections, modifying filter criteria and customizing information displayed in the charts.

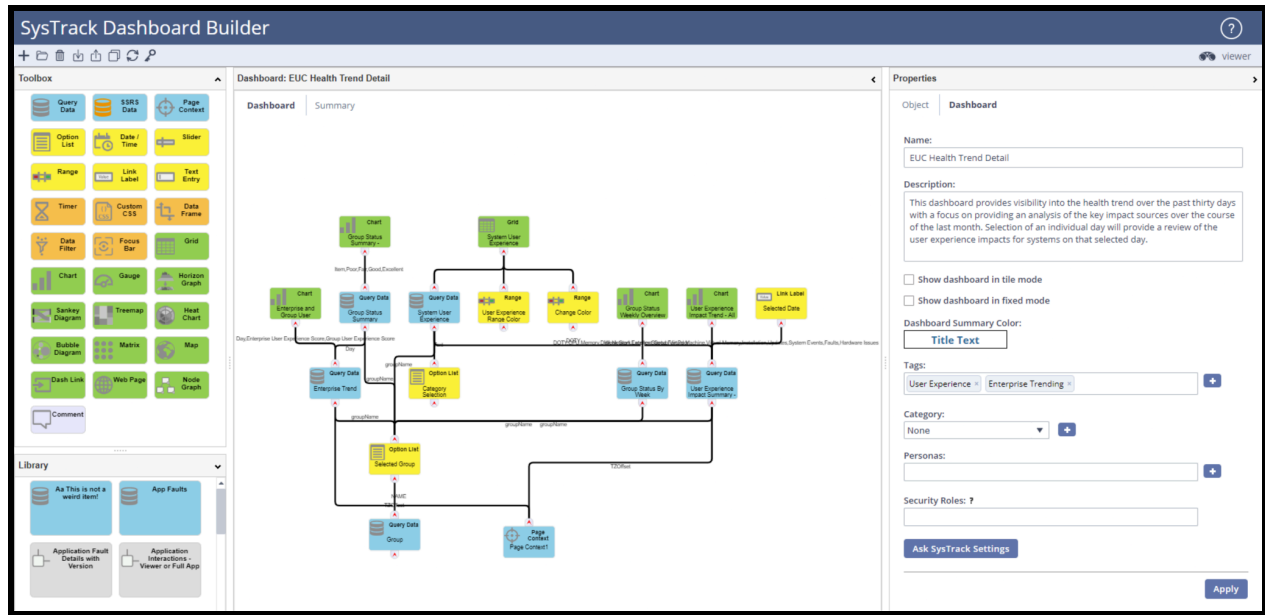
Dashboard Viewer:

SysTrack dashboards can be viewed from the SysTrack Dashboard Viewer.



Dashboard Builder:

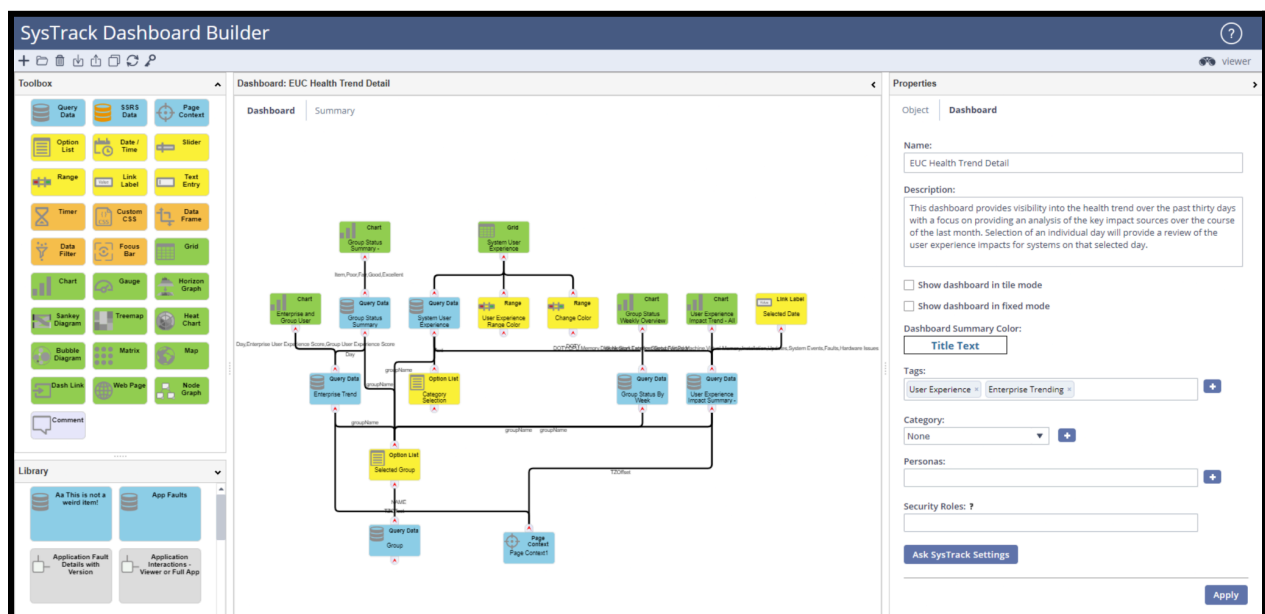
Dashboards are created using the Dashboard Builder. Access to the SysTrack Dashboard Builder is dependent on your security privileges as set up by your System Administrator in SysTrack Deploy.



Build Systrack Dashboard:

The SysTrack Dashboard Builder provides a means for IT professionals to easily create, save, share and refine custom views of any of the data available to them in their enterprise in a way that is easily accessible to a viewer.

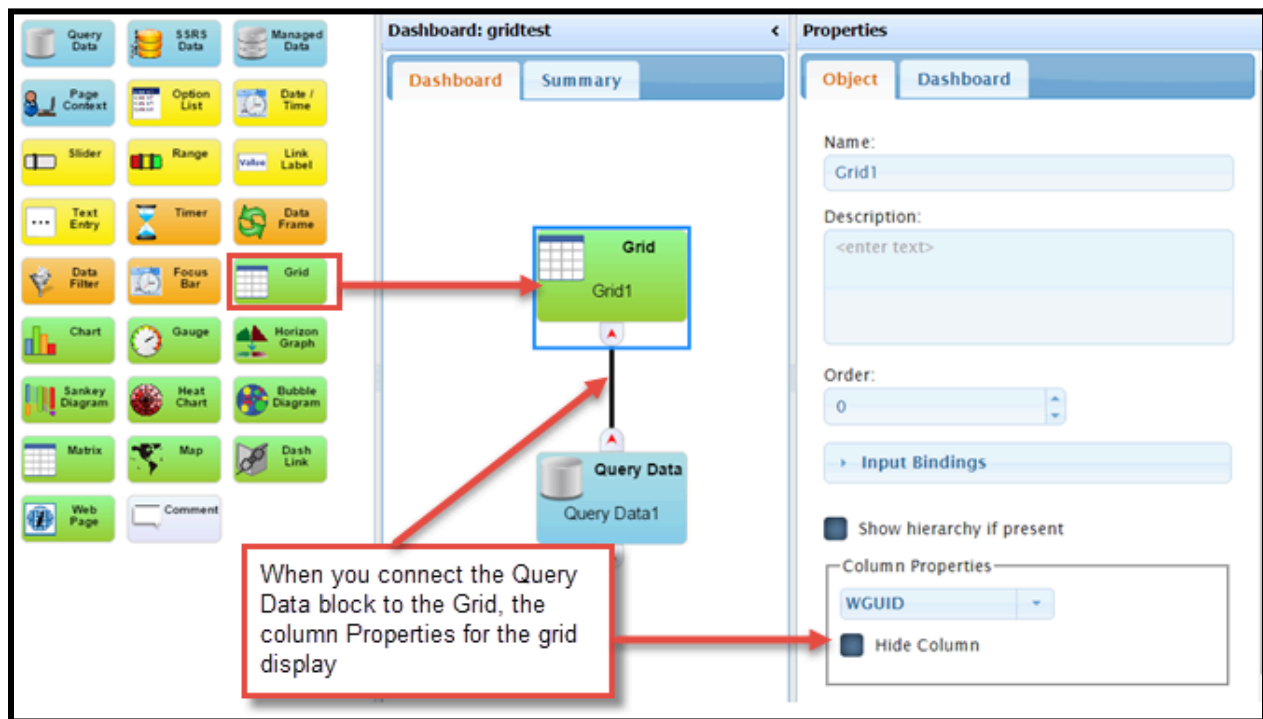
Dashboards are built by using a variety of data blocks and visualization objects on the Dashboard workspace, defining each object's properties and linking them.



Build a Basic Dashboard:

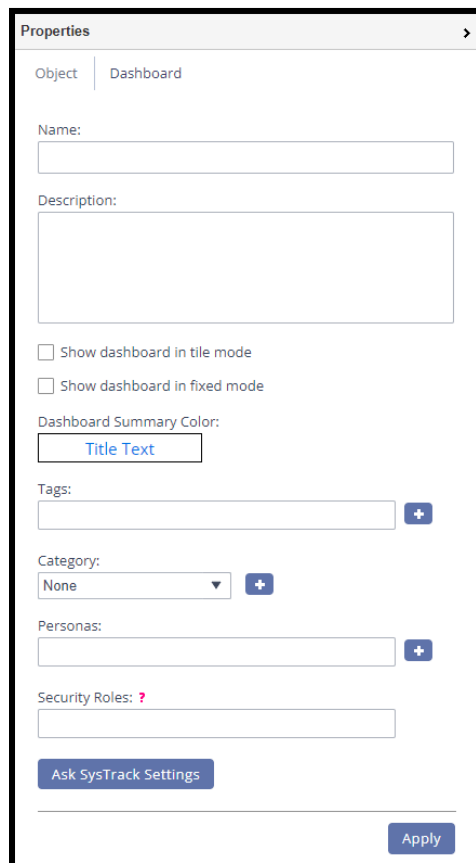
Dashboards are built by dragging **data blocks and visualization objects** from the Toolbox to the workspace, defining each object's properties, and **linking** them to one another. Before you begin, familiarize yourself with the **Dashboard Builder Workspace**.

- 1) Drag a **Query Data block** to the workspace and define the Query Data block as necessary. The Query Data block retrieves data based on a SQL query and makes it available to a grid or other visualization objects. For users who are not completely familiar with writing SQL queries, the **Query Data** block also includes a Query Builder to help you build a SQL query to access SysTrack data.
- 2) Drag a visualization object block to the workspace (for example, a grid, gauge etc).
- 3) **Connect the Query Data Block to the visualization object** (grid, gauge, chart, etc) to supply data input to the visualization object.



- 4) Open the **Input Bindings** section and if necessary select an input. The **Input Bindings** section may be populated automatically if there is only one possible input for the type of object being linked.
- 5) Set the **Properties** for the visualization object on the **Object** tab (such as the **Column Properties** in the example above).
- 6) Optionally, supply an **Order** for where on the Dashboard you want the grid to display.
- 7) Optionally, rename the visualization object block in the **Name** field and provide a **Description**. The name will appear in the visualization object's title bar when the dashboard is viewed.

- 8) Click the **Apply** button on the **Dashboard** tab to save your changes.
- 9) Optionally, select the **Dashboard** tab, then add a **Name** and **Description** and select a **Dashboard Summary Color**. The dashboard name and description will display in any link to the dashboard, such as the Dashboard Browser. The Dashboard Summary Color will be used in the Dash Link object when it displays a link to this dashboard.
- 10) Optionally, either select or define any search tags, categories or personas you want to include with your dashboard.



The screenshot shows a 'Properties' dialog box with a 'Dashboard' tab selected. The 'Object' tab is also visible. The 'Name' field is empty. The 'Description' field is empty. There are two checkboxes: 'Show dashboard in tile mode' and 'Show dashboard in fixed mode', both of which are unchecked. The 'Dashboard Summary Color' field is set to 'Title Text'. The 'Tags' field is empty with a '+' button. The 'Category' field is set to 'None' with a dropdown arrow and a '+' button. The 'Personas' field is empty with a '+' button. The 'Security Roles' field is empty with a '?' icon. At the bottom, there is a button labeled 'Ask SysTrack Settings' and an 'Apply' button.

- 11) If you wish to display your dashboard in Tile mode (suitable for mobile devices), select the **Show dashboard in tile mode** check box.
- 12) If you wish to restrict access to this Dashboard in the Dashboard Viewer select a security role (group or user) from the drop-down list in the **Security Roles** field. Leave this field blank if you wish all Dashboard Viewer users to have access to your dashboard.
- 13) Preview your dashboard to see how it displays in the Dashboard Viewer.

Preview a Dashboard from Dashboard Builder:

Click the **View Dashboard** icon in the top right corner of the Dashboard Builder page. To return to the Dashboard Builder from Dashboard Viewer, click the back button in your browser.

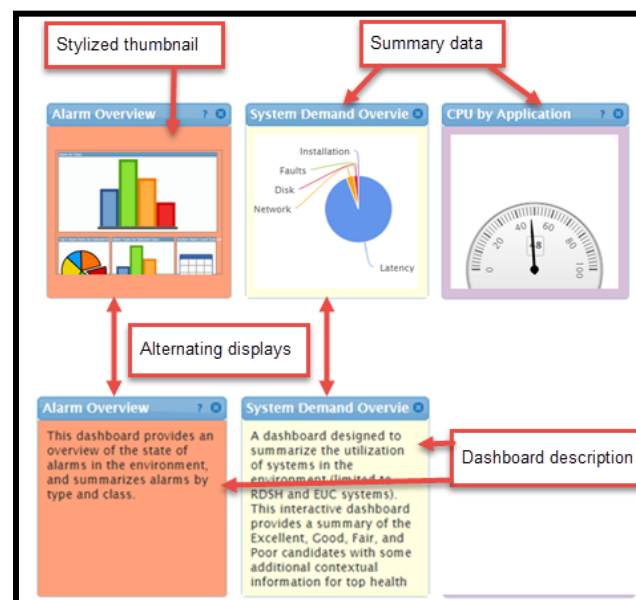
Create a Summary Dashboard:

You can create a summary dashboard composed of dash link panes each of which links to a specific dashboard as shown in the example below.



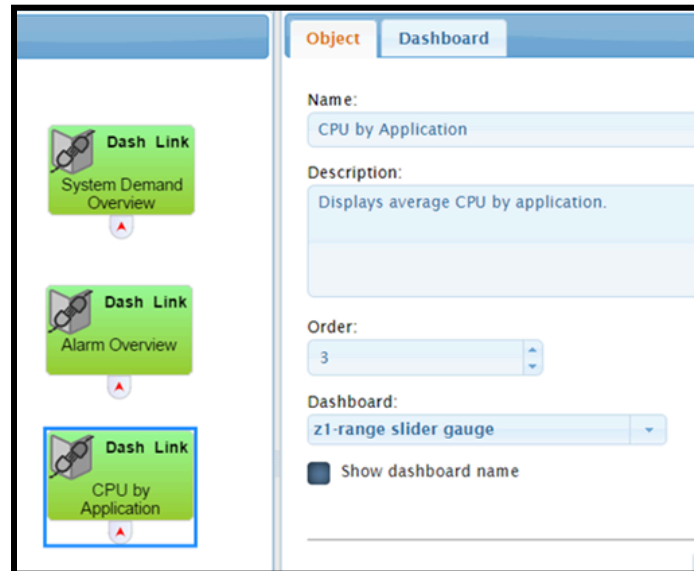
You can choose to display the following on a summary Dash Link pane:

- Alternate between displaying a description of the dashboard and a stylized thumbnail.
- Alternate between displaying a dashboard description and summary data from a grid, chart or gauge.
- Display only summary data from a Grid, Chart or Gauge with no alternating description.

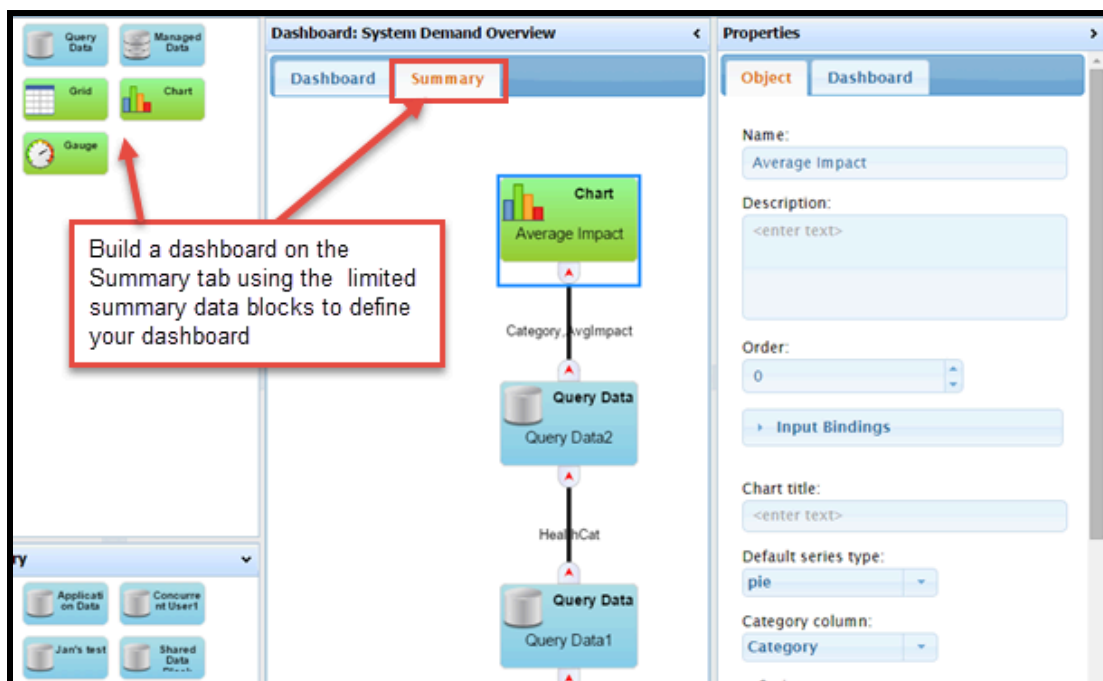


Create a Summary Dashboard for Linked Dashboards:

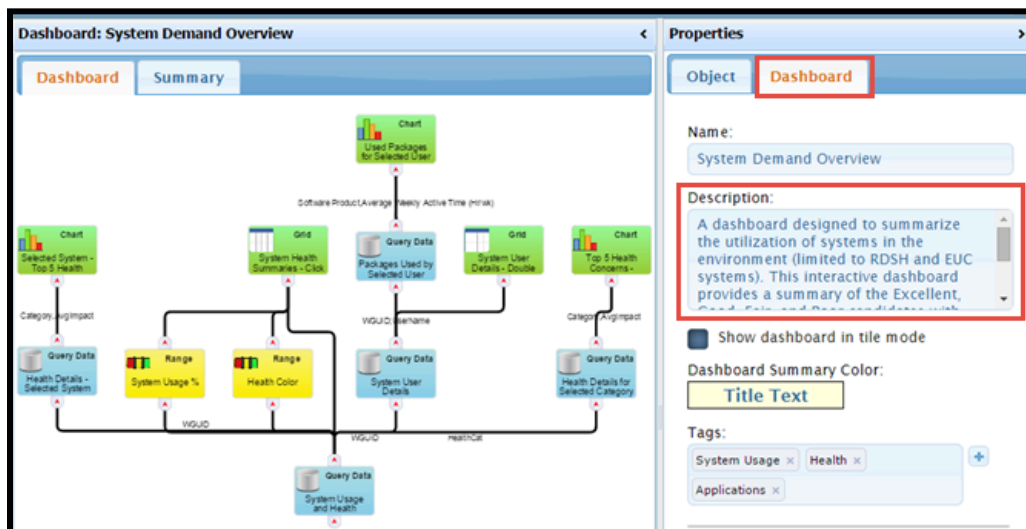
- 1) Define a Dash Link block on your workspace for each dashboard to which you wish to link.



- 2) Optionally, display summary data on a Dash Link pane:
 - Open the dashboard to which you wish to link and click the **Summary** tab.
 - Using the Data blocks available (Query Data, Managed Data, Grid, Chart or Gauge blocks) in the Summary tab Toolbox, build a dashboard for the summary information that you wish to display.



- 3) If you wish to display a description for your dashboard link, enter a description in the **Description** field on the **Dashboard** tab for the dashboard to which you are linking.



- 4) Optionally, click the **Dashboard Summary Color** button to select a color to use as the background color for the Dashboard Link Pane.
- 5) Click **Apply** to save your changes.
- 6) Repeat steps 2 - 5 for each dashboard to which you wish to link from a Dash Link block.