



# System Diagnostics Guide

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# Overview

The System Diagnostics solution provides a way for System Administrators to:

- Monitor and diagnose overall environment performance and task health.
- Examine application metrics and application data volumes.

This solution helps to assure that the OneStream environment and applications are properly sized and efficiently configured, and gives System Administrators the tools to refresh resources.

System Diagnostics provides:

- Detailed environment snapshot analysis across application and database servers.
- Detailed application snapshot analysis of key metrics and data volumes.
- Live monitoring across application and database servers.
- Detailed task analysis including task concurrency, statistics, and counts.
- Application server recycling.

**Important:** Access to System Diagnostics is limited to users with the System Administrator security role. This should be strictly enforced because of the accessibility to application information and controls.

# Setup and Installation

System Diagnostics can be installed within an existing OneStream application, yet it enables you to analyze performance of all applications in a given environment. See [Install System Diagnostics](#) for details.

This section contains important details related to the planning, configuring, and installation of your solution. Before you install the solution, familiarize yourself with these details.

**See also:** [MarketPlace Solution Modification Considerations](#)

## Dependencies

Component	Description
OneStream 6.2.0 or later	Minimum OneStream Platform version required to install this version of System Diagnostics.

## Select the System Diagnostics Development Location

Before beginning installation, decide whether to build the solution directly in the Production OneStream application or in a separate Development OneStream application. This section provides some key considerations for each option.

**Production OneStream Application:** The primary advantage of building the solution in a Production application is that you will not have to migrate the resulting work from a Development application. However, there are intrinsic risks when making design changes to an application used in a Production capacity and not advised.

**Note:** OneStream strongly recommends that you implement the solution in the Development environment with a fresh copy of the Production application before starting work.

**Development OneStream Application:** As a best practice, use the Development OneStream application to build the solution.

## Create the OneStream Development Application

1. Ensure all the OneStream artifacts relating to System Diagnostics such as workflow profiles and entities are in the Production application.
2. Copy your Production application to your Development environment and rename it. Use the development version for your System Diagnostics solution.

## Application Server Settings

You may need to edit the OneStream Application Server Configuration so users can create and change data in the additional database tables. If other MarketPlace solutions (such as Specialty Planning) are already in the application, these adjustments may already exist.

**See also:** [Solution Database Migration Advice](#)

## Configure the OneStream Application Server

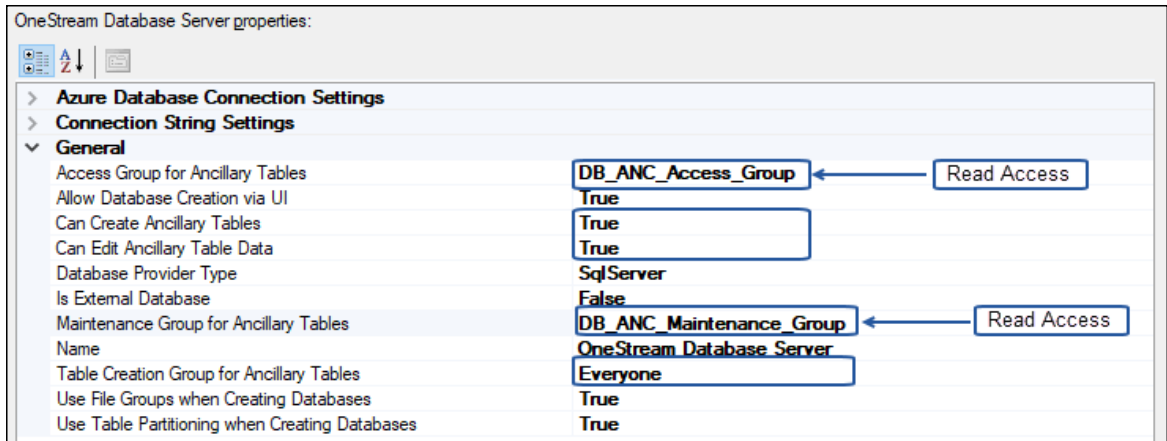
Be sure that the security group settings include the users who will be working on and setting up the solution before proceeding.

**Note:** Group settings are applicable to all MarketPlace solutions; it is important to keep the group names generic.

1. Start the OneStream Server Configuration Utility as an Administrator.
2. Click **Open Application Server Configuration File > Database**.
3. Edit the following **OneStream Database Server properties**:
  - **Access Group for Ancillary Tables:** Select a group that includes those who will access records.
  - **Can Create Ancillary Tables:** True
  - **Can Edit Ancillary Table Data:** True



- **Maintenance Group for Ancillary Tables:** Select a group who will edit and maintain tables.
- **Table Creation Group for Ancillary Tables:** Select a group who can create tables.



4. Restart Internet Information Server.

**Note:** The SQL Server account used for the OneStream application must have the View Server State Permission granted for System Diagnostics to access the SQL Server details. Also, the account running the OneStream application pool must be a local administrator on the server to recycle application servers.

# Install System Diagnostics

Check the Release Notes to determine if uninstalling only the user interface or a full uninstall of the solution is necessary and then read that section for instructions. If the Release Notes indicate that an overinstall is allowed, then continue with these instructions.

1. Download the System Diagnostics solution from the MarketPlace. The package is a zip file named OSD\_PVx.x.x\_SVzzz\_PackageContents.zip where x.x.x and zzz represent version numbers for OneStream and the solution. The PVx.x.x number (for example, 600) represents the minimum Platform Version (6.0.0) required to implement this solution version.
2. On the OneStream MarketPlace Dashboard, click **MarketPlace > System Diagnostics**.

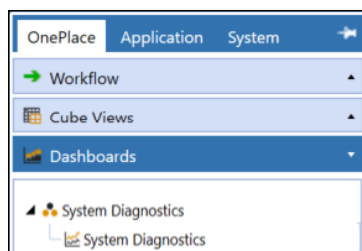


3. On the System Diagnostics Solution page, select the appropriate OneStream platform version from the **Minimum Platform Version** drop-down list.
4. Select the most recent version from the **Solution Version** drop-down list and then click **Download**.
5. Log in to OneStream.
6. On the **Application** tab, click **Tools > Load/Extract**.
7. On the **Load** tab, locate the solution package using the **Select File** icons and click **Open**.
8. When the solution's file name appears, click **Load**.
9. Click **Close** to complete the installation.

## Set Up System Diagnostics

The first time you run System Diagnostics, you are guided through the table setup process.

In OneStream, click **OnePlace > Dashboards > System Diagnostics > System Diagnostics**.

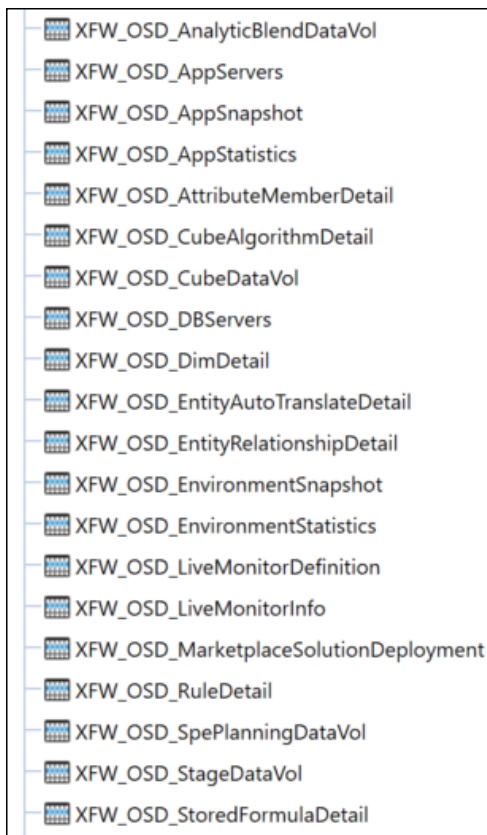


## Create Tables

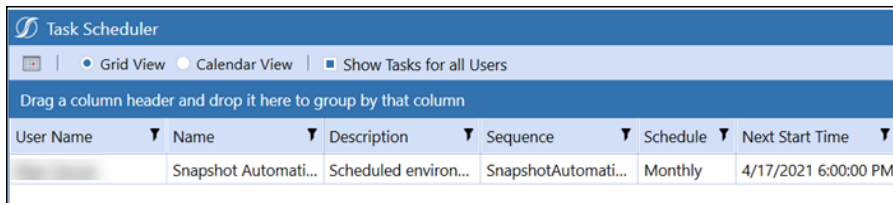
1. Click **Step 1: Setup Tables**.

This step may be necessary when upgrading even if tables are already present. System Diagnostics does not drop any tables that already exist, but modifies table structures and add any new ones if necessary.

The following tables are created in the OneStream framework database:



The Snapshot Automation automation task is created and can be edited in the Task Scheduler.



**Note:** You should receive the message **Solution Table Created** if this is a new implementation of System Diagnostics. If updating a previous release which includes changes to these tables, the message reads **Solution Tables Upgraded**.

See Also:

- [Task Scheduler](#)
- The *Task Scheduler* section in the *Application Tools* chapter of the *Design and Reference Guide*.

2. Click **Step 2: Launch Solution** to open System Diagnostics.

After setting up the solution's tables, a task is created in Task Scheduler that takes Environment and Application snapshots on the third Saturday of each month. You can change the task frequency and timing using the Task Scheduler.

**Note:** The Task Scheduler is currently only available when using the OneStream desktop application.

## Package Contents

The Dashboard Maintenance Unit provides the user interface for System Diagnostics and includes the required dashboard groups, components, data adapters, parameters and files.

## Business Rules

The following business rules are included:

### **OSD\_HelperQueries**

Dashboard Data Set Business Rule. This rule provides query functions for collecting the activity and environment analysis information using a combination of SQL and programmatic data.

### **OSD\_SolutionHelper**

Dashboard Extender Business Rule. This rule provides various functions for the System Diagnostics solution and the Dashboard user interface.

### **OSD\_ParamHelper**

Dashboard XFBR String Business Rule. This rule provides conditional parameter processing functions that allow a parameter value to be interpreted and substituted with a different string.

### **OSD\_LiveMonitoring**

Extensibility Business Rule. This rule allows System Diagnostics to monitor system processing and collect metrics. This Business Rules is intended to be called from a Data Management step.

### **OSD\_ApplicationSnapshot**

Extensibility Business Rule. This rule facilitates Application and Environment manual and Task Scheduled snapshots.

## **Data Management**

The following Data Management Sequences and steps are used with their related Business Rules (as described above). The benefit of running these processes through a Data Management sequence is that they can run in the background while the user continues their work.

Data Management sequences are:

- AppSnapshot\_OSD  
MonitorHealthEnv\_OSD
- MonitorHealthTask\_OSD
- RecycleAllTypesForced\_OSD
- RecycleAllTypesSmart\_OSD
- RecycleConsForced\_OSD
- RecycleConsSmart\_OSD
- RecycleDataMgmtForced\_OSD
- RecycleDataMgmtSmart\_OSD
- RecycleGenForced\_OSD
- RecycleGenSmart\_OSD
- RecycleStageForced\_OSD

- RecycleStageSmart\_OSD
- SnapAutomation\_OSD


Data Management steps are:

- AppSnapshot\_OSD  
MonitorHealthEnv\_OSD
- MonitorHealthTask\_OSD
- RecycleAllTypesForced\_OSD
- RecycleAllTypesSmart\_OSD
- RecycleConsForced\_OSD
- RecycleConsSmart\_OSD
- RecycleDataMgmtForced\_OSD
- RecycleDataMgmtSmart\_OSD
- RecycleGenForced\_OSD
- RecycleGenSmart\_OSD
- RecycleStageForced\_OSD
- RecycleStageSmart\_OSD
- SnapAutomation\_OSD

Data Management sequences used for application and environment snapshots, found in Task Scheduler for the System Diagnostic Automation task:

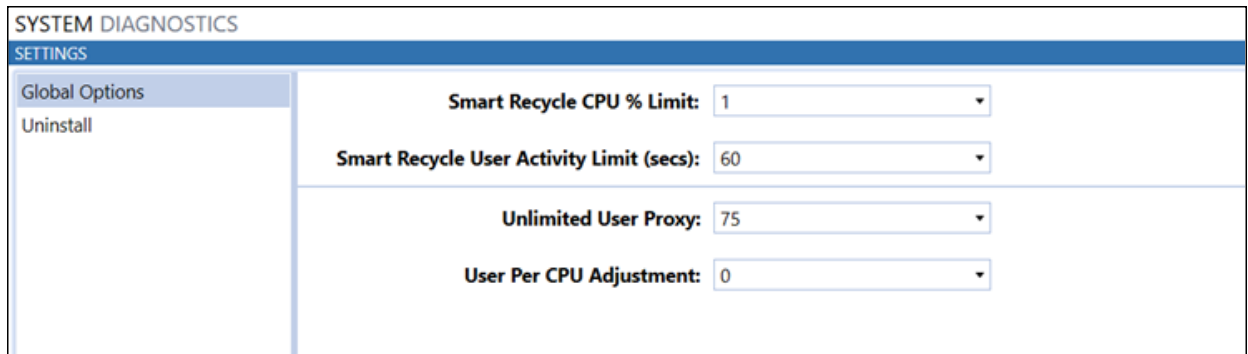
- SnapAutomation\_OSD
- AppSnapshot\_OSD

# Settings

 The **Settings** page contains the **Global Options** tab in which key properties that guide administration are set as well as **Uninstall** tab, which provides solution uninstall options.

## Global Options

The **Global Options** tab is used during the initial setup and configuration of System Diagnostics.



SYSTEM DIAGNOSTICS	
SETTINGS	
Global Options	Smart Recycle CPU % Limit: 1
Uninstall	Smart Recycle User Activity Limit (secs): 60
	Unlimited User Proxy: 75
	User Per CPU Adjustment: 0

### Smart Recycle CPU % Limit

This setting defines the maximum CPU % used on an application server that will allow a Smart Recycle to execute.

### Smart Recycle User Activity Limit (secs)

This setting defines the time in seconds that there must be no user activity to allow a Smart Recycle to execute.

### Unlimited User Proxy

This setting is used for Environment Statistics calculations for companies that have an unlimited user license agreement. If your company has an unlimited user license agreement, then adjust this setting to the closest actual number of users. Otherwise, the calculations are based on the licensed user-count and this setting is not used.

### User Per CPU Adjustment

This setting allows the ability to manually adjust the derived value of users per CPU. Users per CPU is used in the Environment Statistics calculations.

## Uninstall

The **Uninstall** tab allows administrators to uninstall the System Diagnostics user interface or the entire solution.

**Note:** If performed as part of an upgrade, any modifications made to the standard System Diagnostics objects are removed.

There are two uninstall options:

- **Uninstall UI** removes System Diagnostics, including related dashboards and business rules, but leaves the database and related tables in place. Some Global Options will also be cleared because their values are stored in Parameters under Dashboards.

Check the *Release Notes* to determine if this step is necessary. For some releases, this step should be performed before accepting a new version of System Diagnostics because some of the dashboards or other objects may have been modified.

- Choose this option to accept a System Diagnostics update without removing the data tables.
- The *Release Notes* indicate if an overinstall is supported.
- **Uninstall Full** removes all the related data tables, all data, System Diagnostics dashboards, and related business rules.
  - Choose this option to completely remove System Diagnostics or to perform an upgrade that is so significant in its changes to the data tables that this method is required.

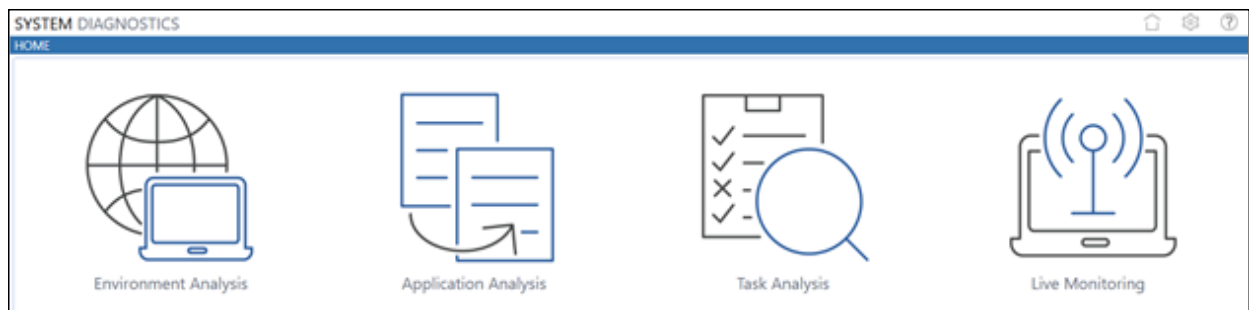
**Note:** The System Diagnostics tables are stored on the Framework database. Removing these tables also removes all related System Diagnostics data for all applications using the same Framework.




# System Diagnostics Home Page

Access the System Diagnostics Home page by navigating to **OnePlace > Dashboards > System Diagnostics > System Diagnostics**.

Starting System Diagnostics opens the System Diagnostics Home Page. Use this page to start the different analysis tools in System Diagnostics so you can monitor and diagnose overall environment performance and task health.



Click  in the System Diagnostics dashboard to return to the Home page.

# Analyze Environments



Use **Environment Analysis** to create environment snapshots by gathering information maintained by OneStream Environment Monitoring features. The environment snapshots provide details on application and database servers, environment statistics, and task health.

## Create an Environment Snapshot

- To create an environment snapshot for a given point in time click **Create**. The new snapshot displays in a list on the left side of the dashboard panel with any other snapshots that have been created.

Snapshots	
Name	Timestamp
New Snapshot	2/26/2018 5:51:58 PM
Baseline2 2018-02-23	2/23/2018 7:09:38 PM
Baseline1 2018-02-22	2/22/2018 7:42:39 PM

- To change a snapshot name, click the name and change it, and click **Save**
- To delete a snapshot, select the snapshot name and then click **Delete**.

## Application Servers

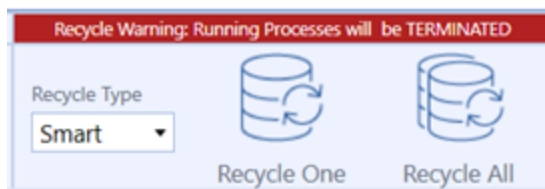
The Application Servers pane shows data specific to the application servers.

Application Servers														
Status	Recycle	ServerRole	AppServerName	MachineName	WcfAddress	IsGen	IsStage	IsCon	IsDM	CPU	CPUmipScore	RamGB	DeriveMaxNumDataRecordsInRAM	ReservedMemoryGB
●	●	(*)G*S*C*D)			Standard (Standard)	■	■	■	■	4	87.13	28	■	25%

## Recycle Application Servers

Recycling Application Servers lets you restart the servers manually, with or without checking application activity. Manually recycling the application servers is needed to improve performance in certain environments due to PowerShell Automation and high concurrency that keep servers from recycling automatically.

**Important:** Recycling terminates all running processes on the application servers.



## Recycle Types

### Smart

This option evaluates the server activity with two tests before allowing a server to recycle. The settings for these tests are maintained in the System Diagnostics Global Options. The server activity tests must both be met before a recycle can be processed.

- The server CPU activity percentage must be less than the Smart Recycle CPU % Limit (default = 1%).
- The server idle user activity timer must exceed the target Smart Recycle User Activity Limit (default = 60 seconds).

### Force

This option recycles without checking for server activity. Selecting this option logs off any users logged on to the application.

### Recycle One

Recycles a specified application server by selecting the environment snapshot and the application server from the list.

### Recycle All

Recycles all application servers.

# Database Servers

This section shows data specific to the database servers.

Database Servers												
Status	DBType	MachineName	InstanceName	LogicalCPUs	PhysicalCPUs	HyperthreadRatio	RamGB	VirtualRamGB	MaxWorkerThreads	IsAzure	AzureDatabaseID	AzureDatabaseName
Application				0	0	0.0	0	0	0		10	..._MKP_Solutions_Dev_5.0
Framework				0	0	0.0	0	0	0		28	OneStream_mpltest_Framework_Web3

Application Server and Database Server data both display in a pivot grid, allowing you to sort and group records using the grid capabilities.

# Analyze Environment Snapshot Data



Select an environment snapshot and click **Analysis** to view the Environment Snapshot data in a table with target, minimum, average, maximum, status, and indicators.

Environment Statistics						
Status	Critical	Group	Item	Value	Information	
Down Arrow		A) Gen-Stage Concurrency	Licensed User-Count	75.0	Company Name: RCSAndISS	
Down Arrow		A) Gen-Stage Concurrency	Licensed Concurrent-Users	26.0	Licensed Users [75] * Estimated Concurrency [0.35] = 26	
Down Arrow		A) Gen-Stage Concurrency	GenServer Users-Per-CPU	4.0	Base Users Per CPU [4.5] - Shared Server Deflator [0.5] - Large DataUnit Defl Note: Gen Servers are: [Shared]	
Down Arrow		A) Gen-Stage Concurrency	GenServer Supported-Users	64.0	Gen CPUs [16] * (Estimated Users/CPU [4] = 64	
Green Circle		A) Gen-Stage Concurrency	** GenServer Capacity-Variance	38.0	Gen Server Concurrency [64] - Estimated Concurrency [26] = 38	
Green Circle		A) Gen-Stage Concurrency	GenServers Balanced	1.0	Gen Servers are Balanced (CPU and RAM Consistent)	
Down Arrow		A) Gen-Stage Concurrency	Num of Enabled User Licenses	23.0	Number of Enabled licensed OneStream users	
Down Arrow		A) Gen-Stage Concurrency	Num of Disabled User Licenses	2.0	Number of Disabled licensed OneStream users	
Down Arrow		A) Gen-Stage Concurrency	Actual Concurrent Logins	6.0	Peak Actual User Concurrency for the past 30 days	
Down Arrow		A) Gen-Stage Concurrency	Actual Concurrent Users	4.0	Peak Actual Distinct User Concurrency for the past 30 days	
Down Arrow		B) Con-DataMgmt Concurrency	ConServer Required-Servers	1.0	Estimated Concurrency [26] / Estimated Users/CPU [4] / Std App Server CPU	
Down Arrow		B) Con-DataMgmt Concurrency	ConServer Available-Servers	1.0	Available Consolidaiton Servers Note: Con Servers are: [Shared]	
Green Circle		B) Con-DataMgmt Concurrency	** ConServer Capacity-Variance	0.0	Con Servers Required [1] - Con Servers Available [1] = 0	
Green Circle		B) Con-DataMgmt Concurrency	ConServers Balanced	1.0	Con Servers are Balanced (CPU and RAM Consistent)	
Green Circle		B) Con-DataMgmt Concurrency	DMServers Dedicated	0.0	Dedicated DM Server NOT required	
Orange Circle	Orange Circle	C) App-Server Settings	AppServer CV-RowLimt (vmRCServApp1)	800,000.0	App Server Max CubeView Row Limit (1000000 Rows) is above recommende may increase network payload.	
Orange Circle	Orange Circle	C) App-Server Settings	AppServer CV-RowLimt (vmRCServWeb1)	800,000.0	App Server Max CubeView Row Limit (1000000 Rows) is above recommende may increase network payload.	
Green Circle		D) DB-Server Resources	AzureSQL Edition-Check (Application)	1.0	AzureSQL is BUSINESS CRITICAL Service Level.	
Green Circle		D) DB-Server Resources	AzureSQL ServiceObjective-Check (Application)	1.0	AzureSQL database is running in an ELASTIC POOL.	
Green Circle		D) DB-Server Resources	AzureSQL Edition-Check (Framework)	1.0	AzureSQL is BUSINESS CRITICAL Service Level.	
Green Circle		D) DB-Server Resources	AzureSQL ServiceObjective-Check (Framework)	1.0	AzureSQL database is running in an ELASTIC POOL.	

**Note:** Any column headers can be dropped into the top row to be grouped by that column.

## Environment Statistics Groups and Items

Environment statistics are grouped as follows:

- **Gen-Stage Concurrency:** Shows concurrency statistics for General-type or Stage-type application servers.
- **Con-DataMgmt Concurrency:** Shows concurrency statistics for Data Management-type or Consolidation-type application servers.
- **App Server Settings:** Shows statistics for the application servers in non-Azure environments.
- **DB-Server Settings (Stand-alone) or DB-Server Resources (AzureSQL DB):** Shows statistics for the database server in a stand-alone database server environment, or the AzureSQL Elastic Pool for Azure Cloud environments.

### A) Gen-Stage Concurrency

Use items in this group to gain insight into the user load on your General-type or Stage-type application servers.

#### **Licensed User-Count**

The total number of users licensed to access the application.

#### **Licensed Concurrent-Users**

The number of users that are currently logged onto the application. The value is the number of licensed users times the estimated concurrency.

#### **GenServer Users-Per-CPU**

This is the maximum number of base users per central processing unit (CPU) minus the shared server deflator and large data unit deflator, plus any CPU adjustment per user.

The shared server deflator is used to account for CPU utilization between servers.

#### **GenServer Supported-Users**

The number of General-type application server CPUs multiplied by estimated users per CPU.

#### **GenServer Capacity-Variance**

General-type application server concurrency minus estimated concurrency.

### **GenServers Balanced**

This indicates whether the CPU and RAM are consistent across General-type application servers. A value of 0.0 means the General-type servers' CPU and RAM are consistent across the application servers. A value of 1.0 indicates CPU and RAM are not consistent.

### **Number of Enabled User Licenses**

Total users that have the "IsEnabled" General setting in the System security settings set to **True**.

### **Number of Disabled User Licenses**

Total users that have the "IsEnabled" General setting in the System security settings set to **False**.

**See also:** The *System Security Users and Groups* section of the *System Administration* chapter of the **Design and Reference Guide**.

### **Actual Concurrent Logins**

Count of the most concurrent user session logins across all platforms (desktop, browser) in the past 30 days. This includes users logged into multiple platforms at the same time.

### **Actual Concurrent Users**

The peak number of actual, distinct users logged in at the same time in the past 30 days.

## **B) Con-DataMgmt Concurrency**

Use items in this group to gain insight into the user load on your Data Management-type or Consolidation-type application servers.

### **ConServer Required-Servers**

Estimated concurrency divided by estimated users per CPU divided by standard application server CPUs, multiplied by General-type application server to Consolidation-type application server ratio.

### **ConServer Available-Servers**

The current consolidation servers being used.

### **ConServer Capacity-Variance**

The required Consolidation servers required less the available con servers. A value of 0.0 means consolidation servers are available. A value of 1.0 indicates that consolidation servers are required.

### **ConServers Balanced**

This indicates whether the CPU and RAM is consistent across Consolidation-type application servers. A value of 0.0 means the consolidation servers' CPU and RAM are consistent across the application servers. A value of 1.0 indicates CPU and RAM are not consistent.

### **DMServers Dedicated**

Indicates whether a dedicated Data Management-type application server is required.

## C) App Server Settings (Non-Azure Environment only)

The group reflects the settings for the application servers.

### **AppServer Minimum-RAM**

The application server minimum is set at 28GB of RAM for cloud-based installs, otherwise 32GB of RAM.

## D) DB-Server Settings or DB-Server Resources (for AzureSQL DB Servers)

The group reflects the settings for the database server in a stand-alone DB server environment or the AzureSQL Elastic Pool for Azure Cloud environments.

### **DB-Server Settings**

#### **DB CPU-Required**

The database server CPU requirements are based on the following logic:

- If estimated concurrency is less than 150 concurrent users, then the required CPU is 8.
- If estimated concurrency is between 150 and 300 concurrent users, then the required CPU is 16.
- If estimated concurrency is greater than 300 concurrent users, then the required CPU is 32.

#### **DB CPU-Available**

The current database CPUs being utilized.

#### **DB CPU-Capacity-Variance**

The available CPUs less the required CPUs for concurrent users.

#### **DB RAM-Required**

The database RAM requirements are based on the following logic:

- If estimated concurrency is less than 75 concurrent users, then the required RAM is 128GB.
- If estimated concurrency is between 75 and 150 concurrent users, then the required RAM is 256GB.

- If estimated concurrency is between 150 and 300 concurrent users, then the required RAM is 512GB.
- If estimated concurrency is greater than 300 concurrent users, then the required RAM is 768GB.

### **DB RAM-Available**

The current database RAM being utilized.

### **DB RAM-Capacity-Variance**

The available RAM less the required RAM for concurrent users.

### **App-Framework DB-Server-Sharing**

Indicates the database server sharing status.

## **DB-Server Resources**

### **AzureSQL Edition-Check (Application)**

Indicates whether the Azure SQL application database runs at a business-critical service level. A value of 1 equals yes. A value of zero equals no.

### **AzureSQL ServiceObjective-Check (Application)**

Indicates whether the Azure SQL application database runs in an Elastic pool. A value of 1 equals yes. A value of zero equals no.




### **AzureSQL Edition-Check (Framework)**

Indicates whether the Azure SQL application framework runs at a business-critical service level. A value of 1 equals yes. A value of zero equals no.


### **AzureSQL ServiceObjective-Check (Application)**

Indicates whether the Azure SQL application framework runs in an Elastic pool. A value of 1 equals yes. A value of zero equals no.

## **Environment Statistics Status**

Status	Description
Informational 	Data point used in environment statistics calculations.
Ok 	Indicates that less than 25% of the evaluations are failing.
Warning 	Indicates that 25%-60% of the evaluations are failing.



Status	Description
Critical 	Indicates that more than 60% of the evaluations are failing. This displays in the <b>Critical</b> column.

## Environment Analysis Reports

Select the report type from the dropdown and click **Go** to run the report.

### Error Log

This report reflects the Error Log activity for the previous 30 days based on the time of the snapshot selected.

### Memory Manager

This report provides the Server Memory details over the previous 15-day period. Any events over 10 days reflect a critical status.

### Resource Validation

This report provides a detailed breakdown of the General Stage Concurrency, Consolidated-Data Management Concurrency, and Database Server Resources.

### Server Detail

This report provides details for the application servers.

### Server Startup

This report provides the Server Startup details over the previous 15-day period. Any day with zero start ups reflects a critical status.

### Large Data Unit Detail

This report reflects the top 200 data units from the Global Option sample year used to derive the large data unit deflator used in calculations.

### Task Activity Log


This report reflects the Task Log activity for the previous 30 days based on the time of the snapshot selected.

# Analyze Applications





Application analysis lets you create application snapshots by gathering information maintained by the selected application and its database tables. The application snapshots provide details on key application metrics that can affect performance as well as an application's data volume details.

## Create an Application Snapshot

1. Click  to create an application snapshot for a given point in time.
2. A pop-up dialog prompts you to enter the Data Volume Year (the year to which the data volume statistics apply), Data Volume Detail (the number of top records recorded for the data volume statistics), and snapshot name. The snapshot name defaults to **New Snapshot** if you leave the snapshot name blank.

The new snapshot displays on the left side of the dashboard panel.

Application: <input type="text"/>			
Name	Timestamp	Year	UserName
New Snapshot	4/13/2021 1:44:40 PM	2020	<input type="text"/>
rcsdev	4/13/2021 9:39:30 AM	2020	<input type="text"/>

To change the snapshot name, select the name field, change the name, and click . To delete a snapshot, select the snapshot name and then click .

## Application Metrics

This section shows the application metrics that are considered key stakeholders drivers in an application's general performance. You can click on any row in the Application Metrics grid to view additional details of the records in that metric.

### Stored Formulas

Applications that have a large number of stored formulas may notice a consolidation performance impact. Green Status: Less than 1000, Orange Status: 1000-2000, Red Status: Higher than 2000.

### **Dimensions with over 1000 members**

Multiple dimensions greater than 1,000 members can result in a large and sparse data model which can impact consolidation and reporting performance. Green Status: Less than 2, Orange Status: 2-3, Red Status: Higher than 3.

### **Members with Auto-Translate Currencies**

Applications that use the Entity Auto Translate property will result in reduced consolidation performance. Green Status: 0, Orange Status: 1-20, Red Status: higher than 20.

### **Cubes with Non-Standard Consolidation or Translation Algorithms**

Applications that use non-standard consolidation or translation algorithm types may result in reduced consolidation performance. Green Status: 0, Orange Status higher than 0. No Red status.

### **Attribute Members**

Applications that have greater than 500 attribute members will have a negative impact on consolidation performance. Green Status: 0, Orange Status: 0-500, Red Status: higher than 500.

### **Number of Stored Records for Largest Data Unit**

Data Units larger than 500,000 records may cause consolidation and reporting performance degradation. Green Status: less than 500,000. Orange Status: 500,000-750,000. Red Status: Higher than 750,000.

### **Number of Stored Records for Largest Workflow**

Workflows with more than 1,000,000 finance load result records may result in reduced stage performance. Green Status: 1,000,000. Orange Status: 1,000,000-1,500,000. Red Status: higher than 1,500,000.

### **One to One Entity Relationships**

Entity hierarchies with numerous one to one parent child relationships can result in poor consolidation performance. Green Status: 0, Orange Status: 1-5, Red Status: higher than 5.

### **Number of Finance Rules and Member Formulas Using BRApis**

Finance Rules and Member Formulas that use BRApi functions can result in a degradation of consolidation performance due to these functions needing to open a database connection. Consider using API function equivalents whenever possible. Green Status: 0, Orange Status: 1-10, Red Status: Higher than 10.

### **Number of Finance Rules and Member Formulas without Consolidation Conditions**

Finance Rules and Member Formulas without consolidation if conditions can result in a degradation of consolidation performance due to the rule potentially needlessly firing at multiple levels of the consolidation dimension. Green Status: 0, Orange Status: 1-10, Red Status: Higher than 10.

### Number of Finance Rules and Member Formulas without Entity Conditions

Finance Rules and Member Formulas without entity if conditions can result in a degradation of consolidation performance due to the rule potentially needlessly firing for both base and parent entities. Green Status: 0, Orange Status: 1-10, Red Status: Higher than 10.

### Number of Finance Rules and Member Formulas Using Active Error Logging

Finance Rules and Member Formulas that have active error logging still commented in can result in a degradation of consolidation performance due to these rules having to write to the error log during a consolidation. Green Status: 0, Red Status: Higher than 0.

## Application Metrics Status

Status	Description
Ok <span style="color: green;">●</span>	Indicates that less than 25% of the evaluations are failing.
Warning <span style="color: orange;">●</span>	Indicates that 25%-60% of the evaluations are failing.
Critical <span style="color: red;">●</span>	Indicates that more than 60% of the evaluations are failing.

## Data Volume Statistics

This section reflects on the application's data volume detail based on the year selected for the snapshot.

Application Metrics		Data Volume Stats					
Cube Data Volumes		Stage Data Volumes		Register Data Volumes		BiBlend Data Volumes	
Cube Data Volumes							
	Cube	Scenario	Consolidation	Entity	Year	DataRowCount	DataCellCount
▸	Houston	Actual	USD	Houston Heights	2020	234	2,808
	GolfStream	Actual	EUR	Frankfurt	2020	69	828
	CapEX	CapEx	USD	Consolidated Legal USD	2020	15	180
	CapEX	CapEx	USD	North Carolina	2020	10	120
	CapEX	CapEx	USD	New Jersey	2020	10	120
	Houston	Actual	USD	South Houston	2020	1	12

### **Cube Data Volumes**

Reports on the Cube, Scenario, Entity, and year combinations with the most data volume rows in the *DataRecord* database tables.

### **Stage Data Volumes**

Reports on the workflows with the most data rows in the *stagetofinanceloadresult* database table.

### **Register Data Volumes**

Reports on workflows with the most records that are found in the installed Register Plan database tables.

### **BiBlend Data Volumes**

Reports on BiBlend data volumes in the *StageBiBlendInformation* database table.

## **Application Analysis Reports**

Application Analysis reports are based on the selected snapshot time period.

### **Snapshot Summary**

Summarizes all the snapshot data found in the Application Metrics and Data Volume Statistics tabs into one PDF report.

### **Marketplace Solution Deployment**

Reports on all the deployed Marketplace Solutions in the current application when the selected snapshot was taken.

### **Long Running Formulas**

Reports on any Long Running Formulas logged in the error log during the previous 30 days from when the selected Snapshot was taken.

## **Compare Application Snapshots**



Click **Compare Snapshots** to compare any two application snapshot metrics. You can compare snapshots in the same application or different applications.

Stat	Snapshot 1	Snapshot 1 Status	Snapshot 2	Snapshot 2 Status	Difference
Stored Formulas	323	●	323	●	0
Dimensions with over 1,000 Members	0	●	0	●	0
Members with Auto-Translate Currencies	0	●	0	●	0
Cubes with Non-Standard Cons. or Trans. Algorithms	4	●	4	●	0
Attribute Members	1	●	1	●	0
Number of Stored Records for Largest Data Unit	0	●	0	●	0
Number of Stage Records for Largest Workflow	0	●	0	●	0
One to One Entity Relationships	6	●	6	●	0
Number of Finance Rules and Member Formulas Using BRAPis	16	●	16	●	0
Number of Finance Rules and Member Formulas without Consolidation Conditions	34	●	34	●	0
Number of Finance Rules and Member Formulas without Entity Conditions	31	●	31	●	0
Number of Finance Rules and Member Formulas Using Active Error Logging	8	●	8	●	0

## Auto-Created Task in Task Scheduler

When the solution's tables are first set up, a task called **System Diagnostics Snapshot Automation** is created in Task Scheduler. Task Scheduler is only viewable on OneStream Desktop. This task runs monthly on the third Saturday of the month at 11:30 PM UTC. The task takes an environment snapshot, and also takes an application snapshot for the application where System Diagnostics was deployed.

If other applications in the same environment already have a System Diagnostics solution installed, a new System Diagnostics install in another application results in the task being scheduled to run 30 minutes before the existing System Diagnostics tasks in the environment to ensure environment resources are not exhausted by having several application snapshots run at the same time.

See also: [Create Tables](#)

## Modify the Task

Administrators can modify the Snapshot Automation OSD task to change the frequency or scheduled time of the Automated Snapshot:

1. Navigate to the **Task Scheduler** page in OneStream (**Application > Tools > Task Scheduler**).
2. Select the task called **Snapshot Automation OSD** and click **Edit**.
3. Click the **Schedule** tab and change the frequency and scheduled time as needed. See the *Task Scheduler* section in the *Design and Reference Guide* for more information on using the **Schedule** tab.

## Re-Create the Task (After deleting)

If the task gets deleted for any reason, and the administrator user wants to re-create the task there are two options.

- Find the dashboard **0\_Frame\_OSDS** under the dashboard group **Solution Setup (OSDS)** and run it. Then click **Setup Tables** to create the task.



**Setup Tables**

- Manually create a task with the desired frequency and select the **SnapshotAutomation\_OSD** sequence. Then set the Year parameter to the current year and the Data Volume parameter to 10, as shown in the following:

The screenshot shows a configuration window with two main sections: 'Sequences' and 'Parameters'.

**Sequences:** A list of sequences is displayed, with 'SnapshotAutomation\_OSD' selected at the bottom. The list includes: RecycleForceGen\_OSD, RecycleForceStage\_OSD, RecycleSmartAllTypes\_OSD, RecycleSmartCons\_OSD, RecycleSmartDataMgmt\_OSD, RecycleSmartGen\_OSD, RecycleSmartStage\_OSD, and SnapshotAutomation\_OSD.

**Parameters:** A table with two columns: 'Name' and 'Value'. It contains two rows: 'Year' with value '2021' and 'DataVolume' with value '10'. Below the table is a button that says 'Click here to add new item'.

Name	Value
Year	2021
DataVolume	10

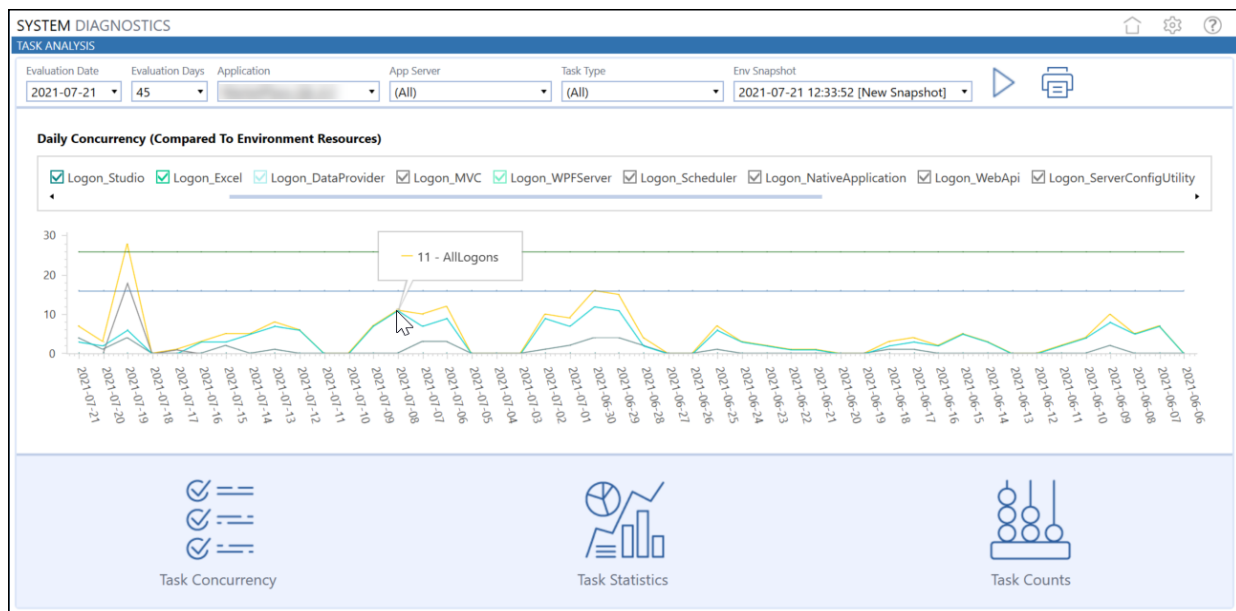
# Analyze Tasks



**Task Analysis** provides the ability to research tasks by concurrency, statistics, and overall counts. Click **Task Analysis** on the [System Diagnostics Home page](#) to start your research on the **Task Analysis** page.

The **Task Analysis** page also provides access to the [Task Concurrency](#), [Task Statistics](#), and [Task Counts](#) pages.

The following image shows the data concurrency chart on the **Task Analysis** page. This is the first page that displays when you click **Task Analysis** on the System Diagnostics Home page.



## Create Charts

All pages available in Task Analysis work the same way. Select criteria at the top of the page that determines the data that displays on the chart. Criteria includes the following:

### Evaluation Date

The date for which you want evaluation data to start.



### Evaluation Days

The number of days prior to the Evaluation Date to evaluate and include on the chart. For example, if you select 2021-07-22 as the Evaluation Date and 15 for the number of evaluation days, the chart reflects data from 2021-07-22 to 2021-07-07.

### Application

Select the name of the application you want to analyze data from the list . Applications in the list are base on your security role.

### App Server

Select a specific application server to search or select the default (All) to include all application servers.

### Task Type

Select a specific task type to evaluate or select the default (All) to include all task types.

### Env Snapshot (Task Concurrency Only)

Select the snapshot that contains the data you want to use as the source for daily concurrency charting.

To create a chart:

1. Use the fields at the top of each of these pages to determine the the data used for charting.
2. Click **Refresh Charts** to create the chart based on the defined criteria.

to run a Daily Concurrency compared to environment resources.

**Tip:** Click **Print** to generate a printable version of the Daily Concurrency chart.

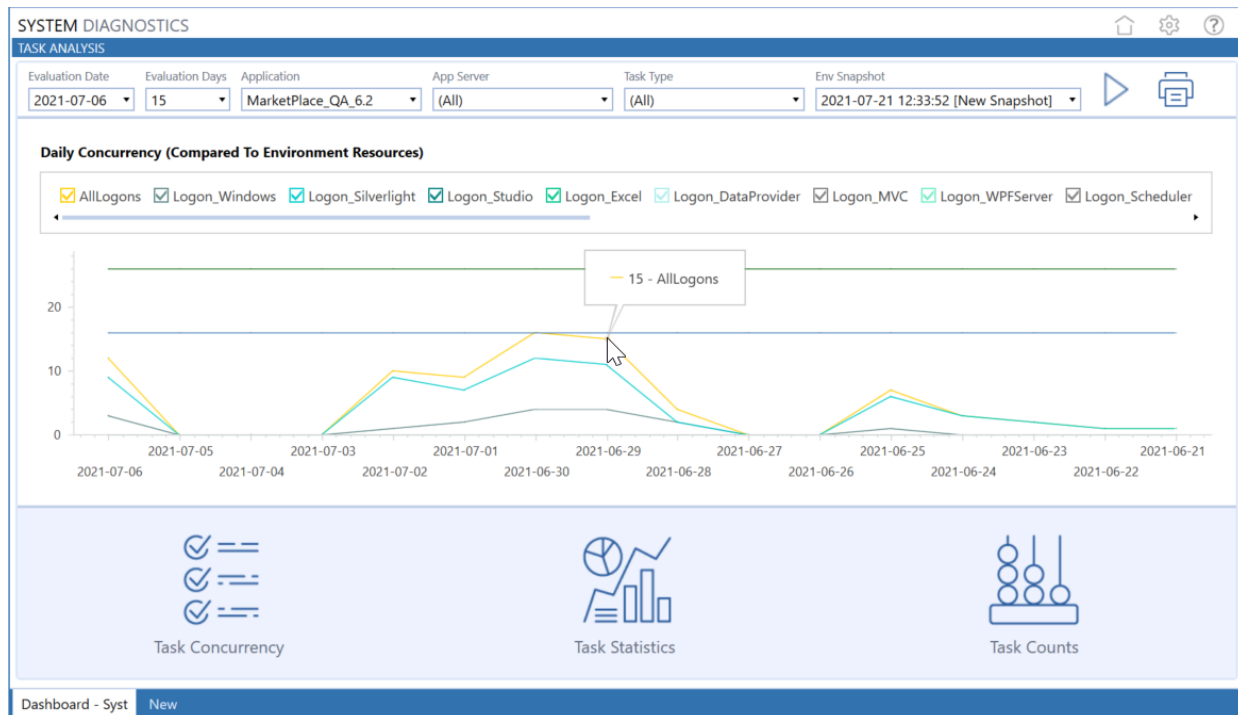
## Task Analysis Page

The **Task Analysis** page lets you query the number of tasks running in parallel over a given time frame by application, application server, task type, and environment snapshot. Use the Task Analysis page to run a daily logon concurrency chart compared to environment resources.

The data is represented as a line chart in the Task Analysis page, with each line representing a daily concurrency type. Check boxes at the top of the chart let you exclude logon types.

You can also hover over data points of the lines in the chart to to see a count of concurrent logons for the highlighted logon type in a pop-up. Data points occur on each date on the chart as defined by the evaluation criteria.

You click on a point in the chart to update the chart using the date for that point as the starting date. The following image shows an example of this. The snapshot date is 2021-07-21, but the chart data starts at 2021-07-06, because a data point on that date was clicked, which cause the chart to update using that date as the evaluation start date.



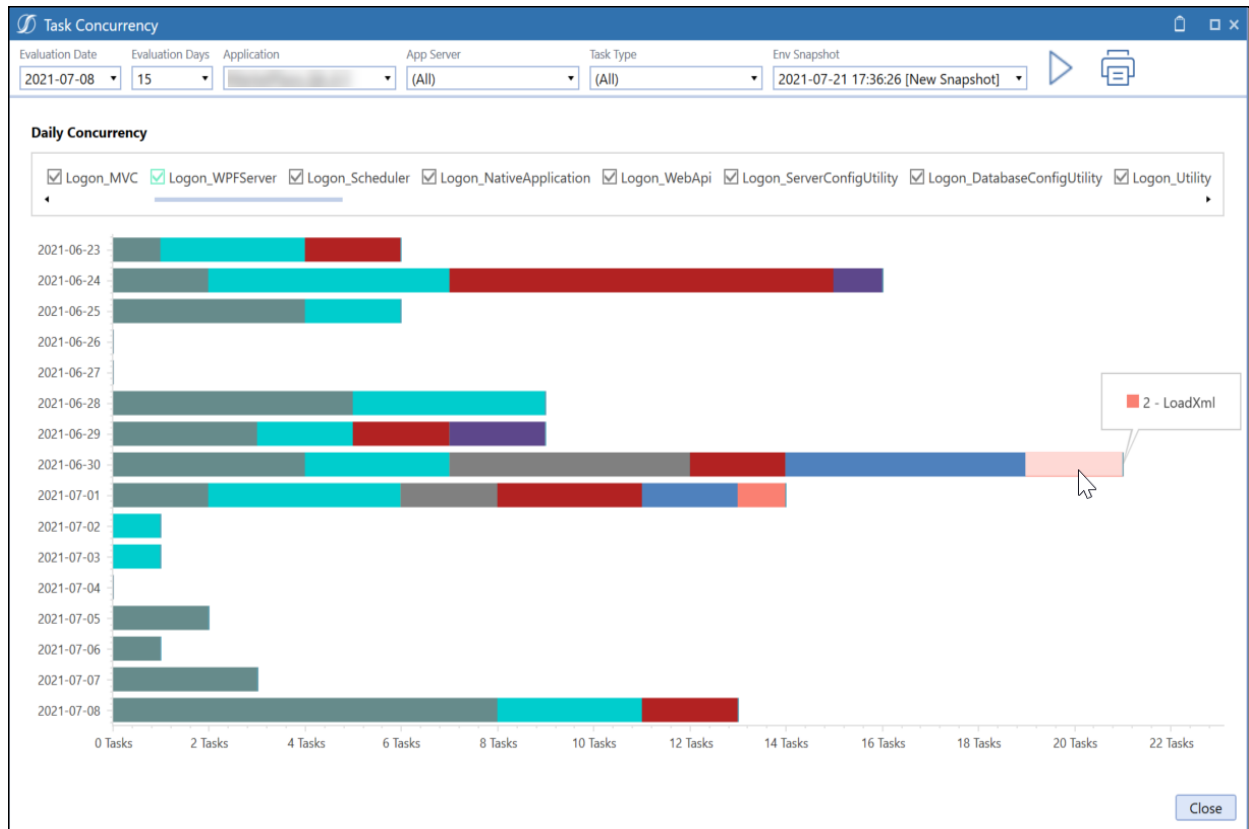
## Task Concurrency



**Task Concurrency** lets you query the number of tasks running in parallel over a given time frame by application, application server, task type, and environment snapshot.

Task Concurrency bar chart data is based on the currently selected criteria. Each bar represents a day during the evaluation period. Each color in a bar represents either a task type defined using the evaluation criteria, or a selected logon type.

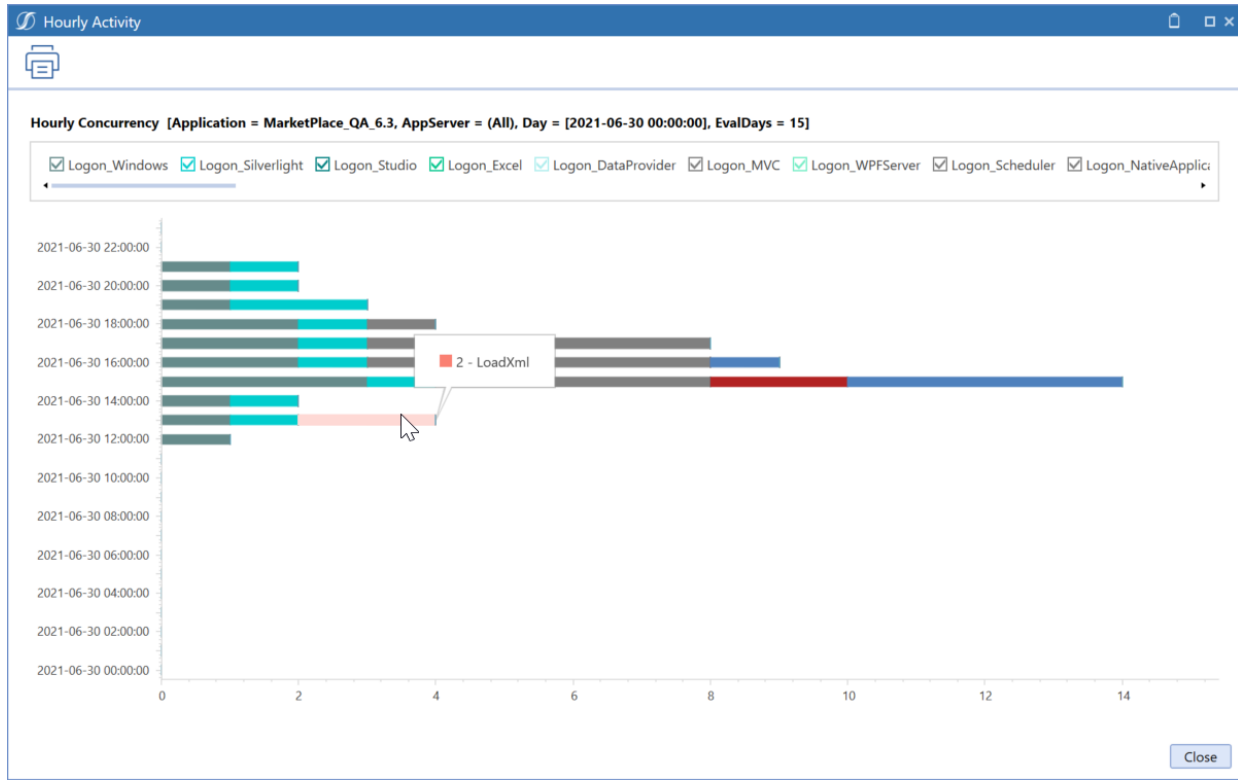
Like Task Analysis charting, check boxes at the top of the Task Concurrency chart represent the different logon concurrencies being tracked based on the evaluation criteria. Select or clear check boxes to show or hide logon types in each bar on the chart.



## View Daily Concurrency Details

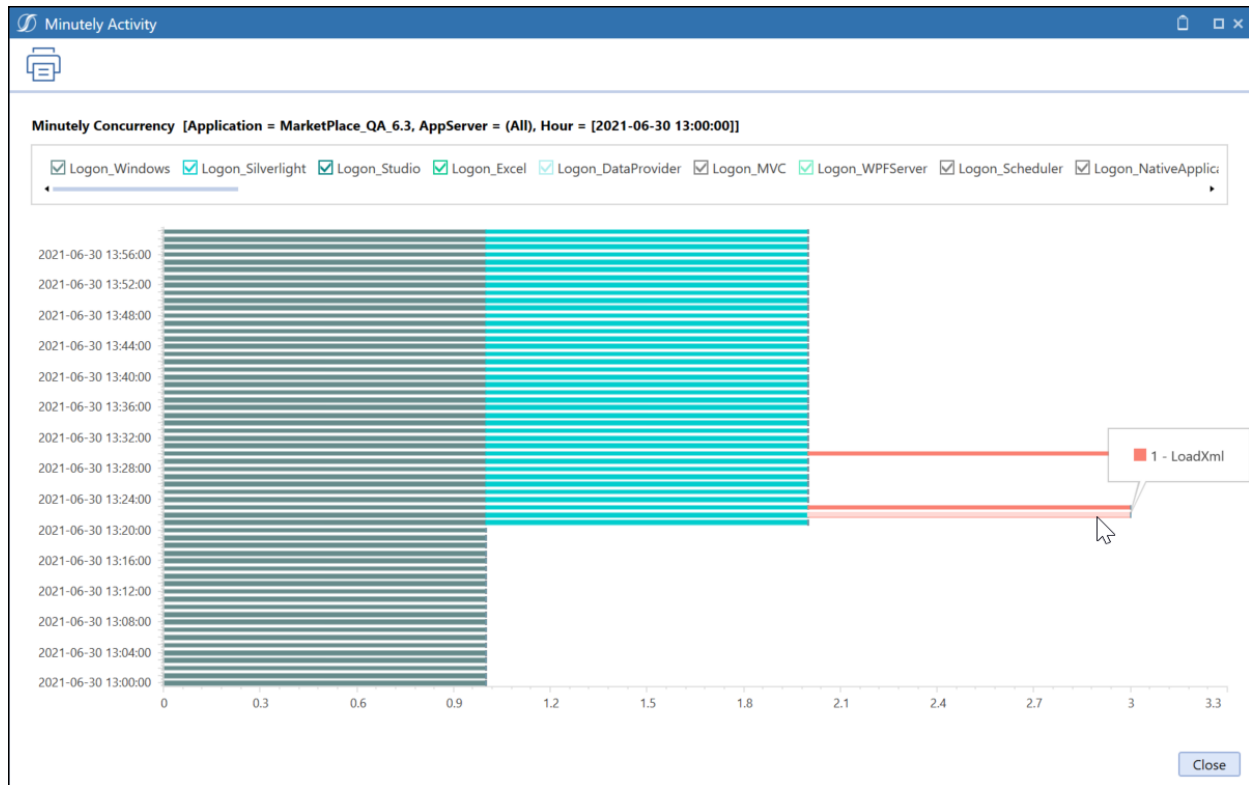
Click on any bar on the Daily Concurrency chart to view the detail for that day in a separate bar chart. The Hourly Activity chart uses a bar to represent each hour increment of the day selected in the Daily Concurrency chart. The chart's left axis labels are for each two-hour increment in the day.

## Analyze Tasks



Click on any bar on the Hourly Concurrency chart to view the detail for that hour in a separate bar chart. The Minutely Activity chart uses a bar to represent each minute increment of the hour selected in the Daily Concurrency chart. The chart's left axis labels are for each four minute increment in the hour.

## Analyze Tasks



Click on any bar on the Minutely Concurrency chart to view specific logon detail, along with any task or error detail for that minute in a separate Detail Application window.

Detail Application = MarketPlace\_QA\_6.3, AppServer = (All), Minute = [2021-06-30 13:22:00]

Logon Detail

Drag a column header and drop it here to group by that column

UserName	AppName	ClientModuleType	ClientXFVersion	ClientIPAddress	PrimaryAppServer	LogonTime	LogoffTime	LogonStatus
		Silverlight	6.3.1.12121	50.232.14.2		06/30/2021 1:21:44 PM	06/30/2021 3:48:18 PM	LoggedOffBySystem
		Windows	6.3.1.12121	34.99.124.51		06/30/2021 12:18:23 PM	06/30/2021 3:28:32 PM	LoggedOffByUser

Task Detail

Drag a column header and drop it here to group by that column

TaskActivityType	Description	AuthSessionID	UserName	AppName	TaskActivityStatus	UseQueueing	Queue
LoadXml	Load XML (AST_PV6.2.0_SV100_PackageContents.zip)	9e52e051-b68a-4e00-8663-e25ccf21599f			Completed	<input checked="" type="checkbox"/>	06/30

Error Detail

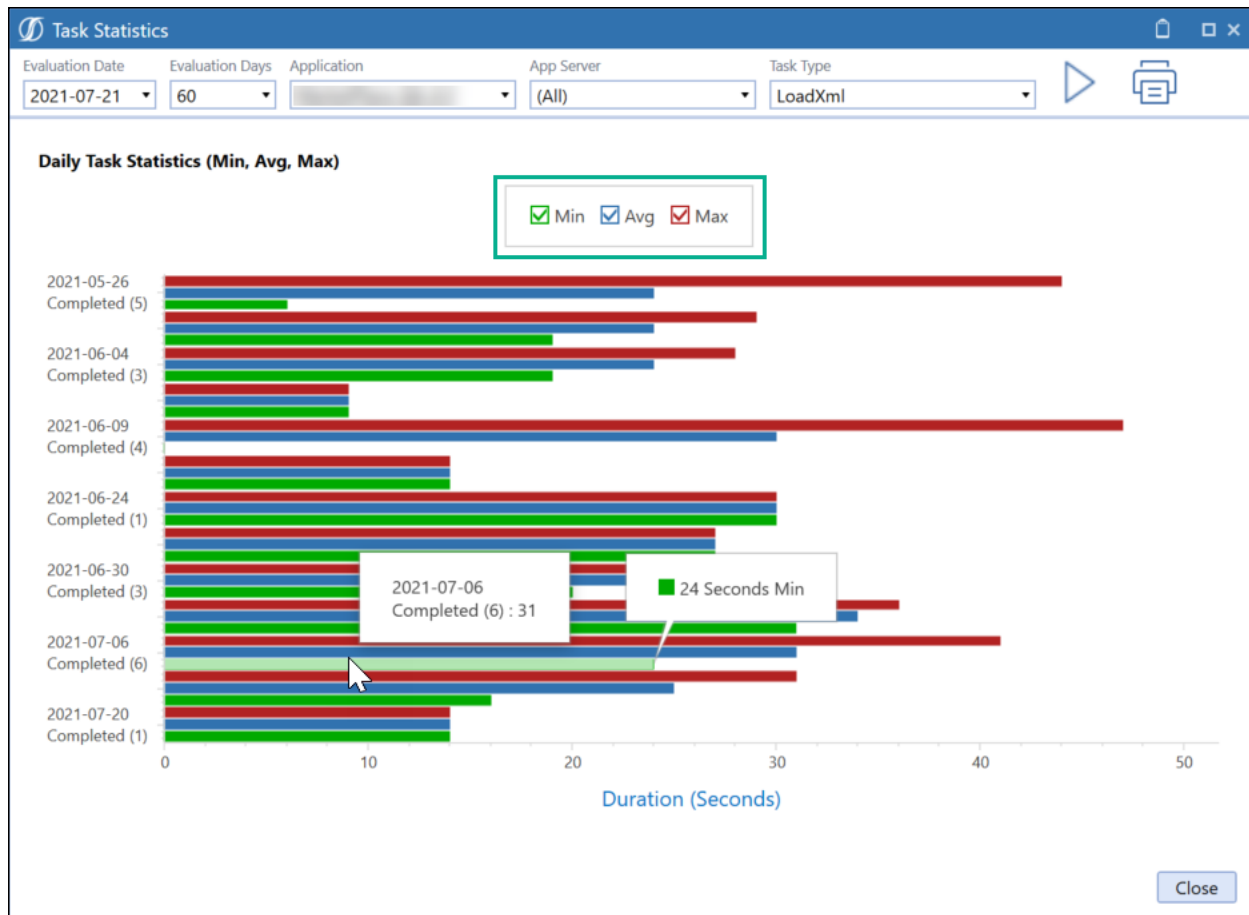
Drag a column header and drop it here to group by that column

Close

# Task Statistics



Task Statistics provides the ability to query the minimum, maximum and average durations in seconds by date, application, app server, and task type.



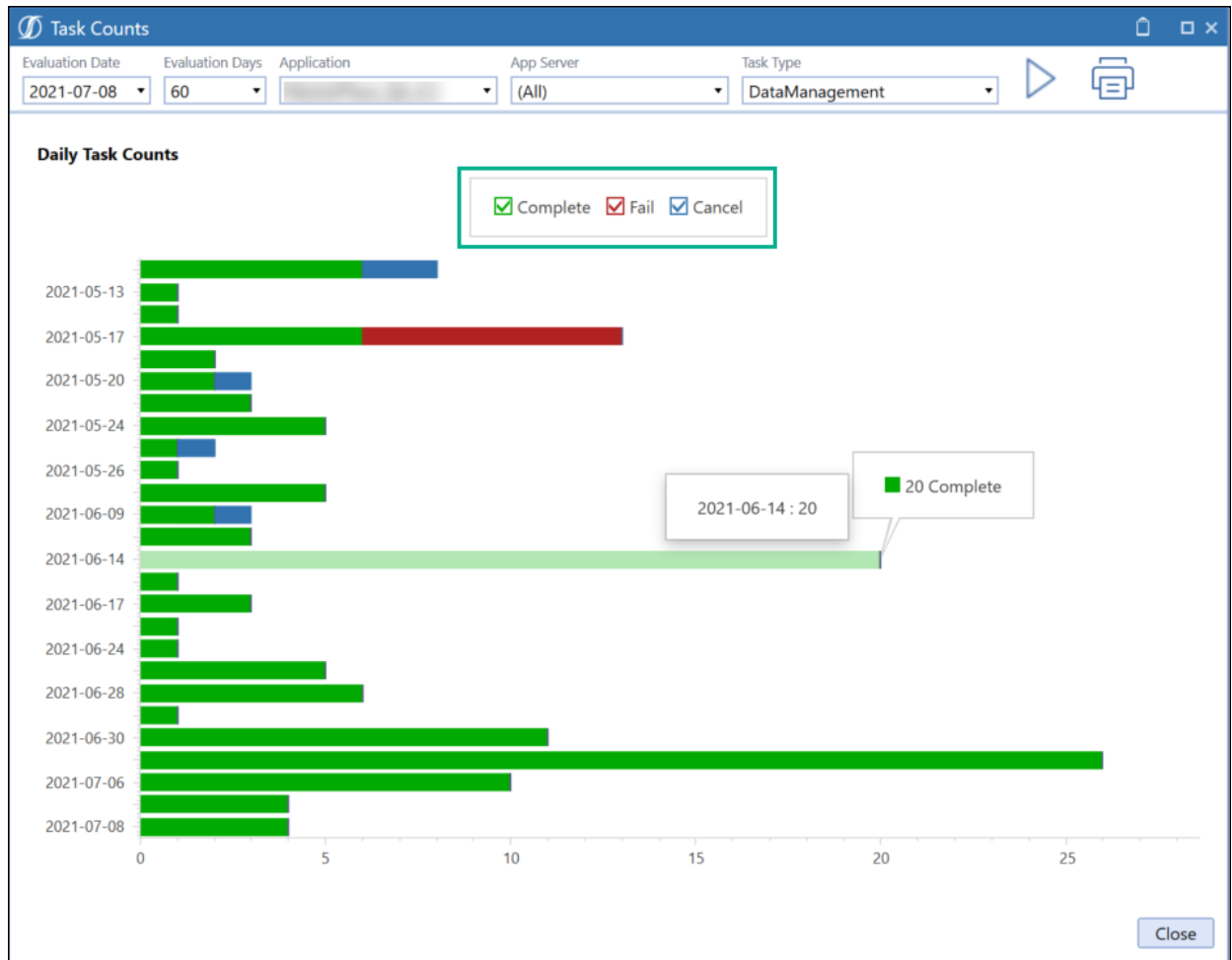
Selecting or clearing Min, Avg, or Max in the statistic key updates the Daily Task Statistics chart.

# Task Counts



**Task Counts** provides the ability to query the number of tasks completed over a given time frame by application, app server, and task type.

## Analyze Tasks



Selecting or clearing Complete, Fail, or Cancel in the Task key instantly updates the Daily Task Counts chart.

# Monitor Environment and Task Health



**Live Monitoring** provides Environment and Task health data for a given time frame.

## Monitor Environment Health

This section provides a way to check the application environment health by different time frame durations and intervals.

The screenshot shows the 'SYSTEM DIAGNOSTICS' interface with a 'LIVE MONITORING' section. It has two tabs: 'Environment Health' (selected) and 'Task Health'. Below the tabs, there are dropdown menus for 'Duration' (set to '2 Min') and 'Interval (Seconds)' (set to '20'). A table titled 'Environment Health' displays the following data:

Type	Description	Minute	Interval	Time
EnvHealth	Monitor Environment Health	2	20000	07/07/2021 9:19:30 PM
EnvHealth	Monitor Environment Health (30 sec. interval)	1	30000	07/07/2021 9:17:09 PM
EnvHealth	Monitor Environment Health	1	10000	07/07/2021 9:15:31 PM

At the bottom of the interface, there are 'Analysis' and 'Pivot' icons, and a 'Select Report' dropdown menu currently set to 'Env Health Analysis'.

To help differentiate between different EnvHealth live monitoring sessions, the Description field can be changed by selecting the Description field, change the Description click **Save**. EnvHealth sessions can also be deleted by selecting them from the list and clicking **Delete Row**.

### Duration


Set the Duration length of time to monitor from a range of 1 minute to 12 hours.



### Interval (Seconds)

Set the Interval period(s) to monitor from a range of 10 to 600 seconds. The first monitoring point will be at the interval time selected with additional point being recorded at each interval.

**Note:** Running short intervals over long durations may impact system performance. An interval of 60 seconds or greater should be used for longer duration monitoring.

Click  to run the Environment Health monitoring job.

Select the job by highlighting a row and select from one of the three output methods, Analysis, Pivot, or Report.

## Analysis



Select **Analysis** to view the Environment Health Monitoring data in a table with target, minimum, average, maximum, status, and critical health indicators.

Status	Critical	Group	Item	Invalid If	Target	Minimum	Average	Maximum
		A) Application Concurrency	Total Logged On Users	Greater Than	16.00	2.00	2.00	2.00
		A) Application Concurrency	Running Task Total		0.00	1.00	1.00	1.00
		A) Application Concurrency	Running Tasks Type: [redacted]		0.00	1.00	1.00	1.00
		A) Application Concurrency	Running Tasks Server: [redacted]		0.00	1.00	1.00	1.00
		B) App Server Health (*G*S*C*D)	XF Memory In Use (GB): [redacted]		0.00	0.76	0.76	0.76
		B) App Server Health (*G*S*C*D)	Server Memory In Use (GB): [redacted]		0.00	28.00	28.00	28.00
		B) App Server Health (*G*S*C*D)	Total Memory (GB): [redacted]		0.00	28.00	28.00	28.00
		B) App Server Health (*G*S*C*D)	Memory Utilization: [redacted]	Greater Than	90.00	1.00	1.00	1.00
		B) App Server Health (*G*S*C*D)	CPU Count: [redacted]		0.00	4.00	4.00	4.00
		B) App Server Health (*G*S*C*D)	CPU Utilization: [redacted]	Greater Than	90.00	0.11	0.19	0.30
		B) App Server Health (*G*S*C*D)	Process Handles: [redacted]		0.00	1,648.00	1,653.00	1,660.00
		B) App Server Health (*G*S*C*D)	Server Logged On Users: [redacted]	Greater Than	16.00	2.00	2.00	2.00
		C.3) DB Server Health - Mem/IO (App)	Blocking Transaction Count		0.00	0.00	0.00	0.00
		C.3) DB Server Health - Mem/IO (App)	Page Life Expectancy	Less Than	3,000.00	20.00	23.00	25.00
		C.3) DB Server Health - Mem/IO (App)	Buffer Cache Hit Ratio	Less Than	95.00	0.02	1.78	5.07
		C.3) DB Server Health - Mem/IO (App)	Memory Grants Pending	Greater Than	0.00	0.00	0.00	0.00
		C.3) DB Server Health - Mem/IO (App)	Total Server Memory (GB)		0.00	8.42	8.43	8.43
		C.3) DB Server Health - Mem/IO (App)	Target Server Memory (GB)		0.00	8.42	8.43	8.43
		C.3) DB Server Health - Mem/IO (App)	Total-Target Memory Ratio	<20% Var	1.00	1.00	1.00	1.00

**Information:** [4] evaluations out of [4] evaluations were GREATER THAN the Target Value of [90]

**Definition:** Page Reads/Sec: Indicates the number of physical database page reads that are issued per second. This statistic displays the total number of physical page reads across all databases.

**Analysis:** Page Reads/Sec: Recommended Page reads/sec value should be under 90. Higher values indicate insufficient memory and indexing issues.

## Environment Health Monitoring Status

Status	Description
Informational ⓘ	Data point that is used in environment health monitoring calculations.
Ok ●	Indicates that the metric does not affect application performance.
Warning ●	Indicates that the metric may negatively affect application performance.
Critical ●	Indicates that the metric is negatively affecting application performance.

## Environment and Task Health Monitoring Status

Status	Description
Informational ⓘ	Data point that is used in environment health monitoring calculations.

## Environment and Task Health Monitoring Groups / Items

### A) Application Concurrency

#### Total Logged on Users

The number of users logged on to the environment compared to the number of users that the environment can support.

If the number of users logged on to the environment is greater than the supported limit for the environment, UI and reporting performance may degrade to the point of requiring an IIS Recycle.

#### Running Task Total

Total concurrent tasks in progress at the time of the monitoring.

#### Running Tasks Type

Total tasks in progress by the type at the time of the monitoring.

#### Running Tasks Server

Total tasks in progress per server at the time of the monitoring.

## B) App Server Health Items

### Memory in Use

The total memory that is being used by OneStream processing.

### Server Memory in Use

The total memory that is being used by the application server.

### Total Memory

The total memory that is available on the application server.

### Memory Utilization

Amount of Memory used for the Analytic Cache and all other Caches.

The reserve Memory must be large enough to hold all Non-Analytic cached items, Metadata, Workflow, Stage Processing, Etc. If this value is consistently high and gets above 90%, Reserve Memory should be increased because Non-Analytic memory consumption is larger than the reserve and virtual memory pressure grow.

### CPU Count

The number of CPUs on the application server.

### CPU Utilization

CPU activity for the specified Application Server as a percentage of 100.

High CPU usage is common for Consolidation, Data Management and Stage servers. However, CPU utilization should fluctuate for General Servers (Consistent high CPU Utilization on General-type application servers indicates more General server CPUs are required).

### Server Logged on Users

The number of users logged onto the application server.

If the number of users logged on to the environment is greater than the supported limit for the environment, UI and reporting performance may degrade to the point of requiring an IIS Recycle.

## C) DB Health Items - (Displays for Application & Framework DBs)

### System CPU Utilization

CPU activity for the specified Database Server. This will not display in AzureSQL Elastic Pool DB environments.

High CPU usage is common for Consolidation, Data Management and Stage servers. However, CPU utilization should fluctuate for General Servers (Consistent high CPU on General servers indicates more General server CPU's are required).

### **SQL Server CPU Utilization**

CPU activity for the specified Database SQL Server. This will not display in AzureSQL Elastic Pool DB environments.

High CPU usage may be a factor of high concurrency on the system and may be an indicator of IO resource bottlenecks (Excessive locks, disk queue management, etc.).

### **Blocking Transaction Count**

The number of transactions that are delayed or stopped from processing in the database.

### **Page Life Expectancy**

Average expectancy for how long each data page is staying in a buffer cache before being flushed out to make room for other pages.

A value below 3000 indicates memory pressure (Below 1000 represents extreme memory pressure). Example: A server with 230GB RAM allocated to the SQL Server buffer pool and a Page Life Expectancy of 300 would equate roughly to 785MB/sec of I/O activity to maintain the page churn inside of the buffer pool. While it might be possible for the I/O subsystem to keep up with this demand, this represents a significant number of page churn in the buffer pool.

### **Buffer Cache Hit Ratio**

Indicates the percentage of pages that were found in the buffer pool without having to incur a read from the disk.

The recommended value should be between 95 And 100. A lesser value indicates memory pressure.

### **Memory Grants Pending**

Indicates the number of processes waiting on a workspace memory grant.

A higher value indicates the server needs more memory.

### **Total Server Memory (GB)**

Amount of memory that a server has committed using the memory manager.

### **Target Server Memory (GB)**

Amount of memory that a server is willing to allocate to the buffer pool under its current load. The Target Server Memory value shows how much memory the SQL Server needs for the best performance.

### **Total-Target Memory Ratio**

Total Server Memory / Target Server Memory

When the Total Server Memory and Target Server Memory values are close, there's no memory pressure on the server. The recommended ratio value should be 1.

### **Total Connection Count**

The number of client connections accessing the database.

High connection count near the target means that the MaxPoolSize of the SQL Connection should be increased, or connection time-outs may occur.

### **Total Select Count**

The number of select statements executed during the monitor period.

### **Total Insert Count**

The number of insert statements executed during the monitor period.

### **Total Update Count**

The number of update statements executed during the monitor period.

### **Total Delete Count**

The number of delete statements executed during the monitor period.

### **Lazy Writes/Sec**

Indicates the number of times per second the server relocates dirty pages from buffer pool to disk.

The recommended value for Lazy Writes/Sec is below 20. Higher paging and disk I/O activity indicate insufficient memory. Check Page Life Expectancy and if its value is low (below 1000 seconds), then this is a clear indication of memory pressure.

### **Page Reads/Sec**

Indicates the number of physical database page reads that are issued per second. This statistic displays the total number of physical page reads across all databases.

The recommended Page Reads/Sec value should be under 90. Higher values indicate insufficient memory and indexing issues.

### **Page Writes/Sec**

Indicates the number of physical database page writes that are issued per second.

Recommended value for Page Writes/Sec is below 90. Higher paging and disk I/O activity indicate insufficient memory.

## **Pivot**



Select **Pivot** to view the Environment Health Monitoring data in a table by the number of interval evaluations that were selected.

Environment Health Monitoring												
Environmental Health Monitoring (Pivot)												
Drag a column header and drop it here to group by that column												
Group	Item	Eval1	Eval2	Eval3	Eval4	Eval5	Eval6	Eval7	Eval8	Eval9		
C.2) DB Server Health - CPU (Framework)	System CPU Utilization	20	20	20	20	19	19	21	21	22		
C.2) DB Server Health - CPU (Framework)	SQL Server CPU Utilization	1	1	0	0	1	1	2	2	2		
C.3) DB Server Health - Mem/IO (App)	Blocking Transaction Count	0	0	0	0	0	0	0	0	0		
C.3) DB Server Health - Mem/IO (App)	Page Life Expectancy	24	51	13	41	1	28	56	15	42		
C.3) DB Server Health - Mem/IO (App)	Buffer Cache Hit Ratio	99.75	100	99.46	100	98.41	100	100	93.07	100		
C.3) DB Server Health - Mem/IO (App)	Memory Grants Pending	0	0	0	0	0	0	0	0	0		
C.3) DB Server Health - Mem/IO (App)	Total Server Memory (GB)	0.35	0.36	0.34	0.35	0.33	0.35	0.36	0.38	0.4		
C.3) DB Server Health - Mem/IO (App)	Target Server Memory (GB)	3.89	3.93	3.9	3.99	0.33	4.04	3.99	4.04	3.93		
C.3) DB Server Health - Mem/IO (App)	Total-Target Memory Ratio	0.09	0.09	0.09	0.09	1	0.09	0.09	0.09	0.1		

## Reports

Select **Report** to view the Environment Health Monitoring analysis and detail.

### Env Health Analysis

This report provides the Environment Analysis for the Application and Database Servers.

### Env Health Analysis (With Explanations)

This report provides the Environment Analysis for the Application and Database Servers with explanations.

### Env Health Detail

This report provides the Environment Detail for the Application and Database Servers.

## Monitor Task Health

This section provides a way to check the task health by different task types, durations, intervals and evaluations.

MONITOR TASK HEALTH								Unhealthy Tasks
Task Type	Duration	Interval (Seconds)	Seconds Before Flag					
LoadCube	8 Hr	240	60					
Task Health								Unhealthy Tasks
Type	Description	Minute	Interval	Eval Bef Log	Secs Bef Flag	Time	Username	
TaskHealth	Monitor Task Health (LoadCube)	480	240000	1	60	2/22/2018 4:12:35 PM	Administrator	
TaskHealth	Monitor Task Health (Translate)	180	60000	1	10	2/22/2018 4:11:38 PM	Administrator	
TaskHealth	Monitor Task Health (Consolidate)	60	10000	1	10	2/22/2018 4:11:13 PM	Administrator	
TaskHealth	Monitor Task Health (CubeView)	30	60000	1	10	2/22/2018 4:10:46 PM	Administrator	
TaskHealth	Monitor Task Health (GetDataCells)	60	60000	3	60	2/22/2018 4:10:30 PM	Administrator	
TaskHealth	Monitor Task Health (ProcessCube)	60	60000	5	6000	2/22/2018 4:08:51 PM	Administrator	

### Task Type

Set the type of task to monitor.

### Duration

Set the Duration length of time to monitor tasks from a range of 1 minute to 12 hours.

### Interval (Seconds)

Set the Interval period(s) to monitor tasks from a range of 10 to 600 seconds.

### Seconds Before Flag

Set the Seconds Before Flag to capture tasks that have been processing for more than a 10 to 6000 second runtime.

### Evaluation Before Log

Set the Evaluation Before Log from a range of 1 to 10 to determine the number of times to skip logging the task if the task has exceeded the seconds before flag.

Select Go to run the Task Health monitoring job.

Select the job by highlighting a row and select from one of the three output methods, Analysis, Pivot, or Report.

## Reports

Select Report to view the Task Health Monitoring analysis and detail.

## Task Health Analysis

This report provides the Environment Analysis for the Application and Database Servers.

## **Task Health Analysis (With Explanations)**

This report provides the Environment Analysis for the Application and Database Servers with explanations.

## **Task Health Detail**


This report provides the Environment Detail for the Application and Database Servers.

## **Unhealthy Tasks**

This section will reflect any tasks that are not processing successfully for a given monitoring time frame.



# Help and Miscellaneous Information

 This page contains solution documentation.

## Display Settings

OneStream and MarketPlace solutions frequently require the display of multiple data elements for proper data entry and analysis. Therefore, the recommended screen resolution is a minimum of 1920 x 1080 for optimal rendering of forms and reports.

Additionally, OneStream recommends that you adjust the Windows System Display text setting to 100% and do not apply any custom scaling options.

## Package Contents and Naming Conventions

The package file name contains multiple identifiers that correspond with the platform. Renaming any of the elements contained in a package is discouraged in order to preserve the integrity of the naming conventions.

**Example Package Name:** OSD\_PV6.2.0\_SV100\_PackageContents.zip

Identifier	Description
OSD	Solution ID
PV6.2.0	Minimum Platform version required to run solution
SV100	Solution version
PackageContents	File name

## Solution Database Migration Advice

A development OneStream application is the safest method for building out a solution with custom tables such as this one. The relationship between OneStream objects such as workflow profiles and custom solution tables is that they point to the underlying identifier numbers and not the object names as seen in the user interface. Prior to the solution configuration and to ensure the identifiers match within the development and production applications, the development application should be a recent copy of the production application. Once the development application is created, install the solution and begin design. The following process below will help migrate the solution tables properly.

**See also:** *Managing a OneStream Environment* in the *Design and Reference Guide*.

1. In the production OneStream application, install the solution and create the data tables. See [Configure the OneStream Application Server](#) for Database Server Connection settings and installation details.
2. Data tables are created in the OneStream Development application during the solution installation. Using the [Microsoft Data Migration Assistant](#), copy the data from the tables to the Production Microsoft SQL Server Database. Only the Microsoft SQL Administrator should run the migration assistant.

**Important:** This process has the potential to overwrite existing table data in the production application database if data already exists.

# MarketPlace Solution Modification Considerations

A few cautions and considerations regarding modification of MarketPlace solutions:

- Major changes to business rules or custom tables within a MarketPlace solution will not be supported through normal channels as the resulting solution is significantly different from the core solution.
- If changes are made to any dashboard object or business rule, consider renaming it or copying it to a new object first. This is important because if there is an upgrade to the MarketPlace solution in the future and the customer applies the upgrade, this will overlay and wipe out the changes. This also applies when updating any of the standard reports and dashboards.
- If modifications are made to a MarketPlace solution, upgrading to later versions will be more complex depending on the degree of customization. Simple changes such as changing a logo or colors on a dashboard do not impact upgrades significantly. Making changes to the custom database tables and business rules, which should be avoided, will make an upgrade even more complicated.