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# Genesys Pulse Help

Genesys Pulse 8.5.1

12/29/2021

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# How do I generate real-time reports using Genesys Pulse?

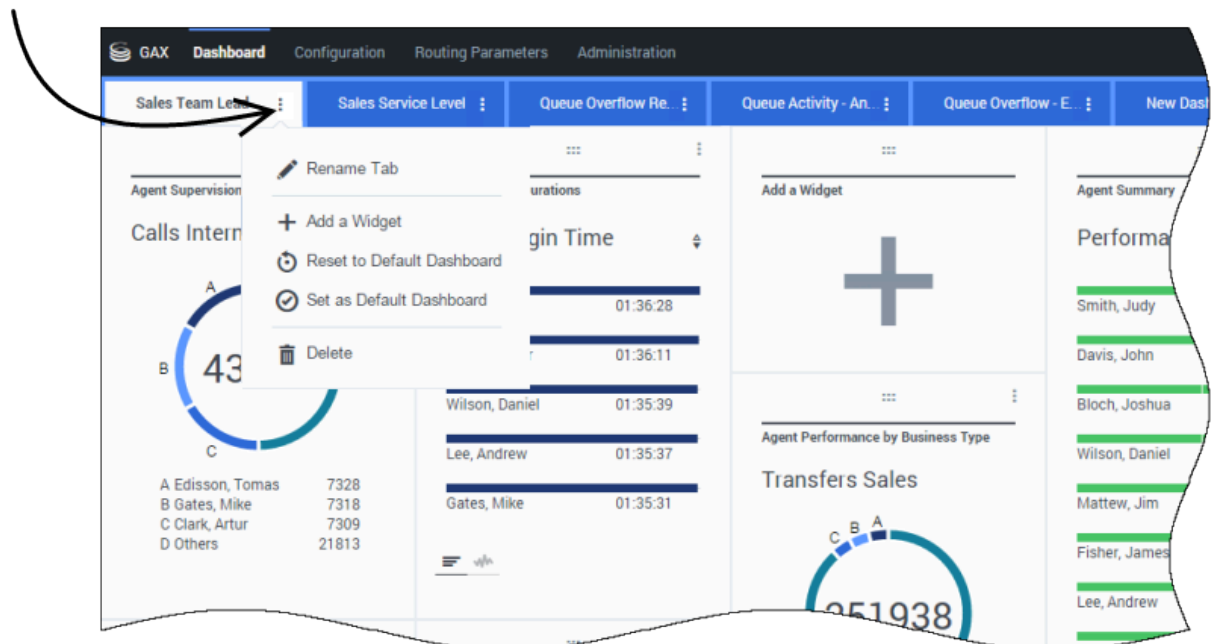
Genesys Pulse is a Genesys Administrator Extension (GAX) plug-in application that enables at-a-glance views of real-time contact center statistics within the GAX graphical user interface. On the Genesys Pulse dashboard, widgets display user-defined Donut, Grid, Key Performance Indicator (KPI), or List charts of statistics for objects. You can view and select additional details and options by expanding a widget. Once maximized, you can choose a Stacked Bar, Grouped Bar, Grid or Line Chart view. You can also sort the data, select which objects to include, and edit the widget.

## Important

You require the appropriate user privileges to perform actions.

## How do I access Genesys Pulse real-time reports?

*more icon*



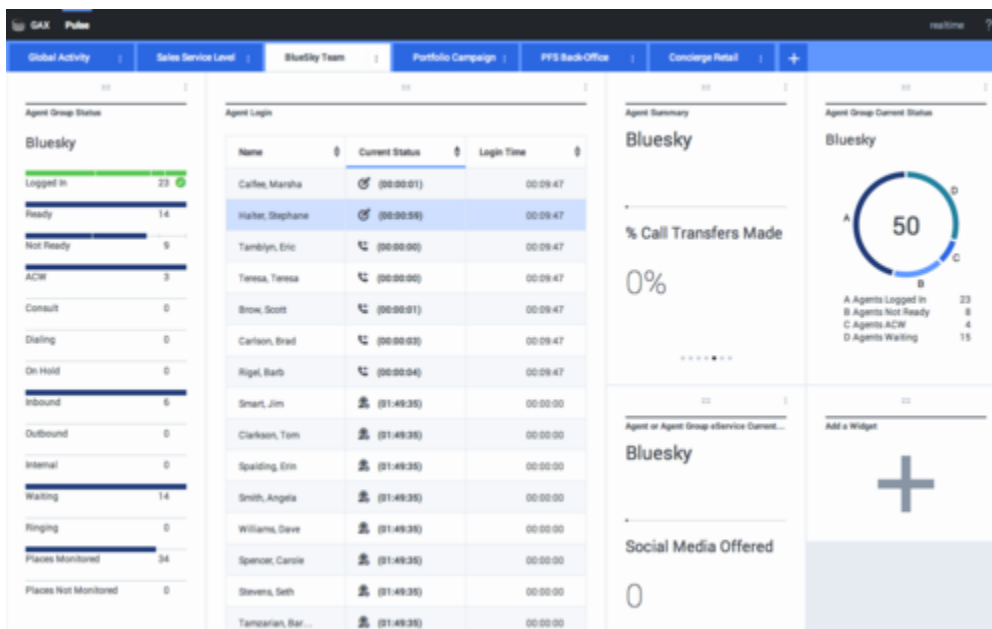
You can open the **Pulse** dashboard within Genesys Administrator Extension (GAX) to see the real-time reports. Reports are displayed in widgets, which can easily be expanded to dashboard size to display additional detail.

Genesys Pulse provides a default dashboard the first time you use Genesys Pulse. Dashboards are managed by using tabs. Click on the more icon in the right corner of the dashboard for options:

- **Rename Tab**—Change the name of the Genesys Pulse Dashboard tab.
- **Add a Widget**—Add a new widget to the dashboard.
- **Reset to Default Dashboard**—Deletes all widgets and resets to the default dashboard.
- **Set as Default Dashboard**—Set the dashboard to be the default. Available to users with full privileges.
- **Delete**—Deletes the dashboard.

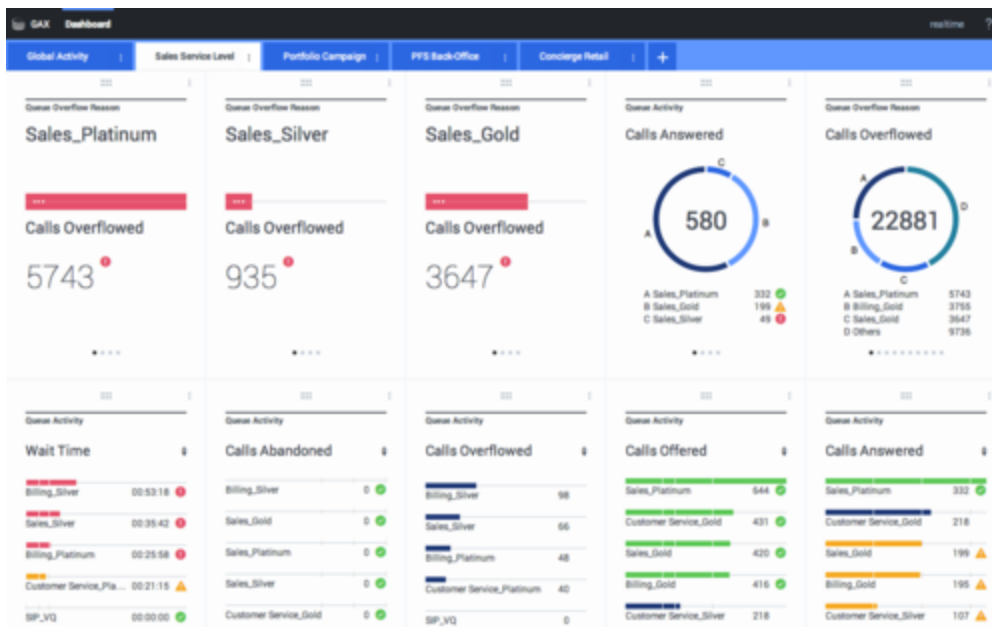
## Genesys Pulse Dashboard Examples

### [+] Sales team lead dashboard

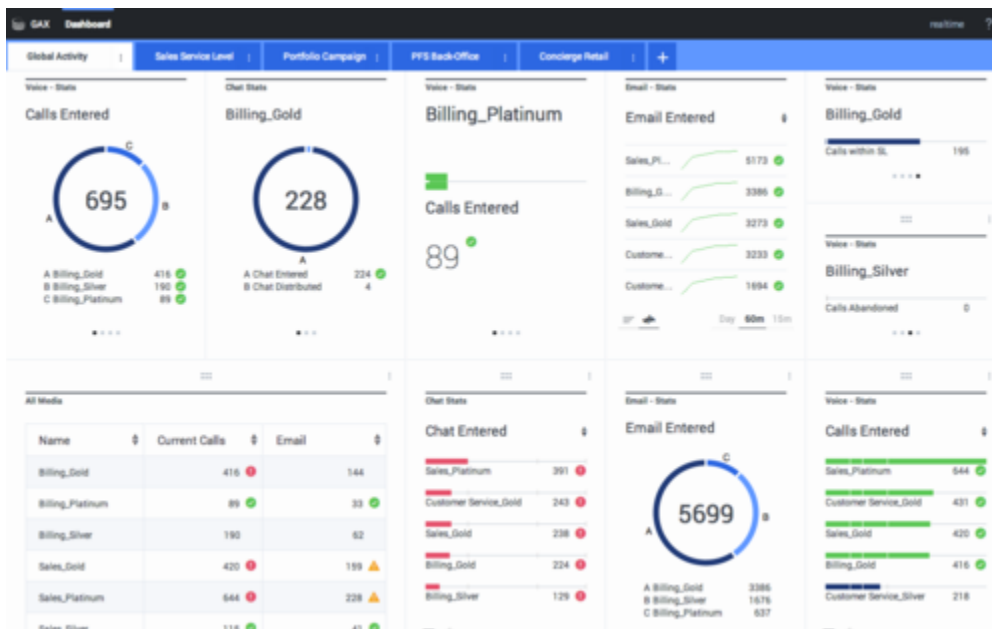


### [+] Sales service level dashboard for a supervisor

How do I generate real-time reports using Genesys Pulse?

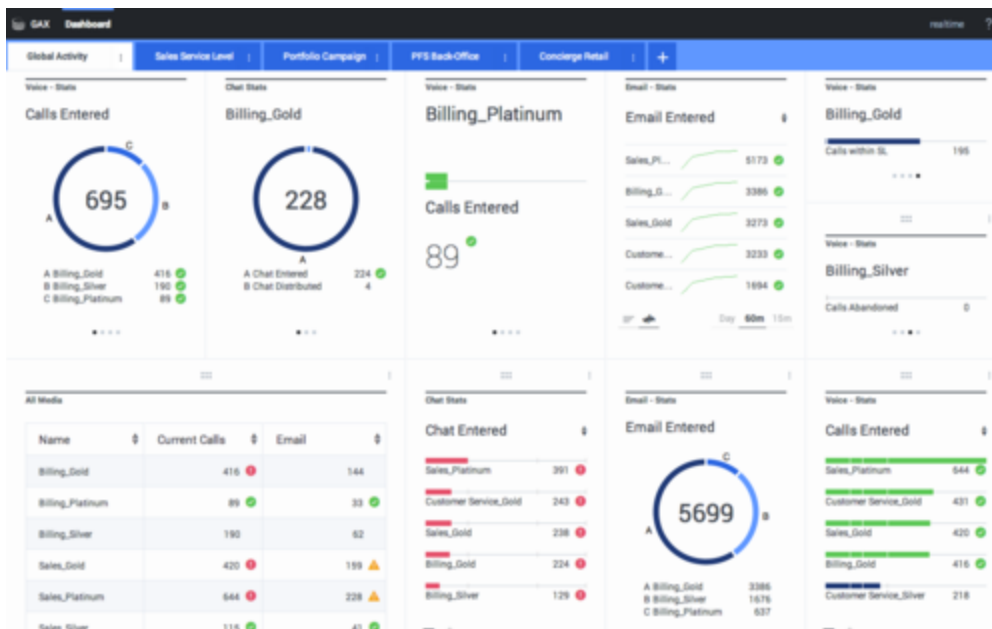


### [+] Multi-channel dashboard for a supervisor



### [+] User-defined dashboard for a supervisor

How do I generate real-time reports using Genesys Pulse?



[+] Outbound campaign dashboard for a supervisor



[+] Back-office dashboard for a supervisor

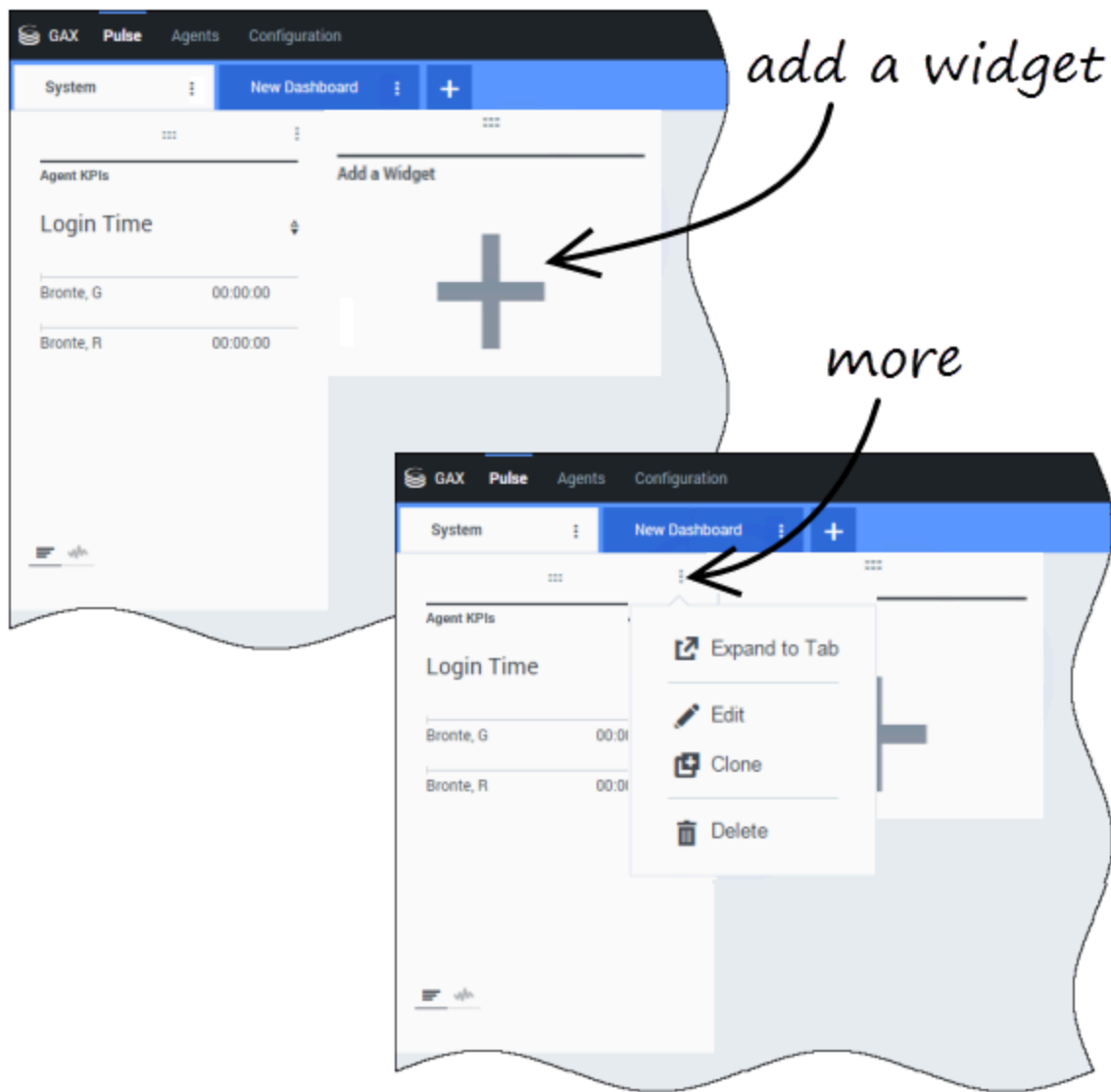
How do I generate real-time reports using Genesys Pulse?



How do I generate real-time reports using Genesys Pulse?

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How do I use the report widgets on my dashboard?



Genesys Pulse widgets display Donut, Grid, Key Performance Indicator (KPI), Line, or List charts of key statistics for objects on your dashboard.

You can **add new widgets to your dashboard**.

You can perform the following actions on a widget:

- Clone
- Delete
- Edit



## How do I generate real-time reports using Genesys Pulse?

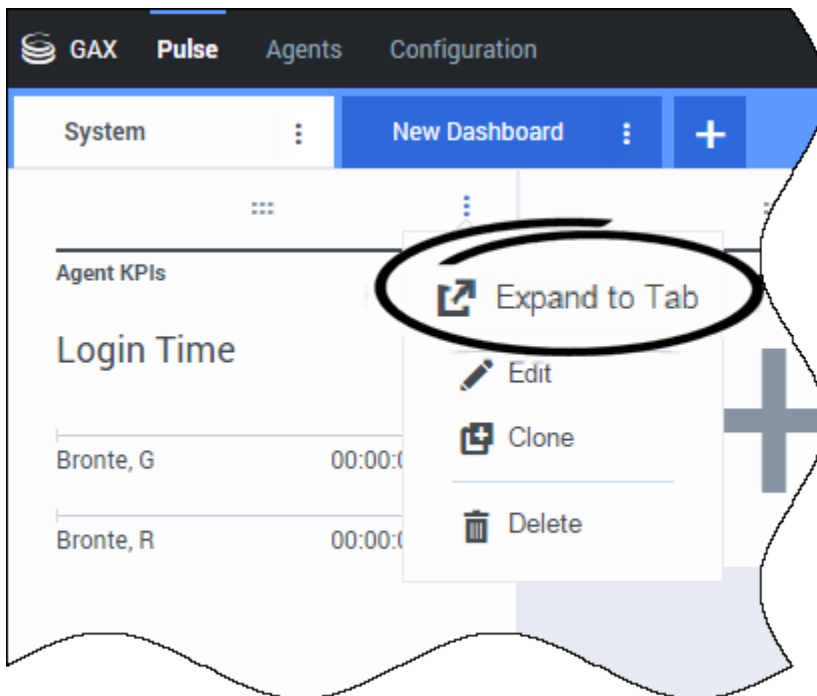
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- Expand

## How do I download report data?

You can save the report data from an expanded widget as a CSV file. Click the more icon in the top right corner of an expanded widget and select **Download widget**.

## How can I expand a report to fill the dashboard?



Click on the more icon in the top right corner of a widget and select **Expand to Tab** to see a detailed view of your report.

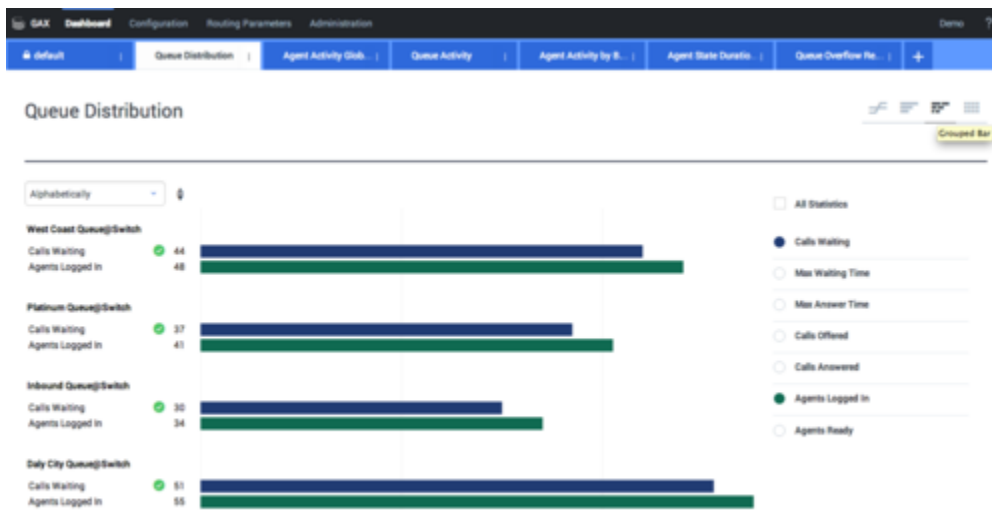
There are four chart types available in the expanded widget:

### [+] Line

How do I generate real-time reports using Genesys Pulse?

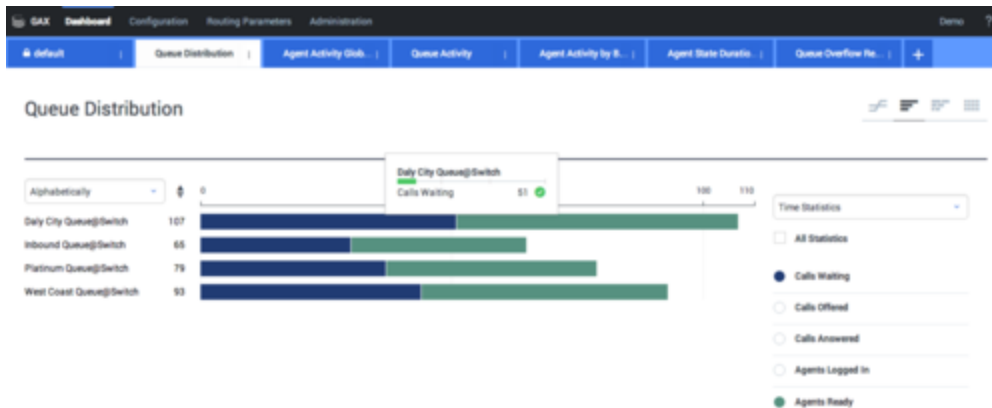


## [+] Grouped Bar



## [+] Stacked Bar

How do I generate real-time reports using Genesys Pulse?



## [+] Grid

CT - EWM Resource

Name	Work Items Processed	Work Items Accepted	Work Items Rejected	Work Items Terminated	Calls Processed	Calls Transferred	Work Items Transfers	Avg Processing Time	Processing Time
Spigola, Kristi	1	1	1	0	0	0	0	00:11:42	00:11:42
Chanel, Monique	3	3	1	0	0	0	0	00:36:21	01:49:05
Milburn, Kristen	1	1	0	0	0	0	0	00:12:26	00:12:26
Hammond, Steve	0	0	0	0	0	0	0	00:00:00	00:00:00
McDaddy, Trevor	0	0	0	0	0	0	0	00:00:00	00:00:00

This expanded report opens within a new tab, so you won't impact your initial dashboard. You can rename your new tab by clicking on the more icon in the top right corner of the tab and select **Rename Tab**. From here, you can use sort options, define objects, and define statistics. Click the pencil icon to change the number of columns for the Grid.

## How do I give users permission to customize their dashboard?

Your Genesys Pulse users might want to save any changes they make to their dashboards. You can enable this by granting them the proper permissions.

Allowing users to customize Genesys Pulse dashboards

*Add the Person object*

*Select these boxes*

The screenshot shows the 'Configuration Manager' interface. The breadcrumb trail is 'Home > Persons > Persons > DEVOPS > TeamA > Adam.Apple@company.com Properties'. The left sidebar has tabs: General, Member Of, Ranks, Options, Permissions, Dependencies, and Accessible Objects. The main area is titled 'Permissions' and contains a table with columns: Name, Tenant, Read, and Update. The table lists several objects, including 'Adam.Apple@company.com', 'Supervisors-TeamA', 'RPS Users', 'Managers-TeamA', 'DEVOPS Supervisors', and 'DEVOPS Pulse Only'. The 'Read' and 'Update' checkboxes for the 'Adam.Apple@company.com' user are circled, and an arrow points to the 'Add' button in the 'Person' object list.

Name	Tenant	Read	Update
Adam.Apple@company.com	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Supervisors-TeamA	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RPS Users	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Managers-TeamA	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEVOPS Supervisors	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DEVOPS Pulse Only	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>

On the **Configuration Manager** page, under **Accounts**, go to **Persons** and find the User that you want to edit. On the **Permissions** tab, **Add** the Person object for this user. Once the Person object appears in the Permissions list, add both **Read** and **Update** permissions for this user.

Don't forget to **Save** the permission before closing the window.

Do this for each user you want to enable.

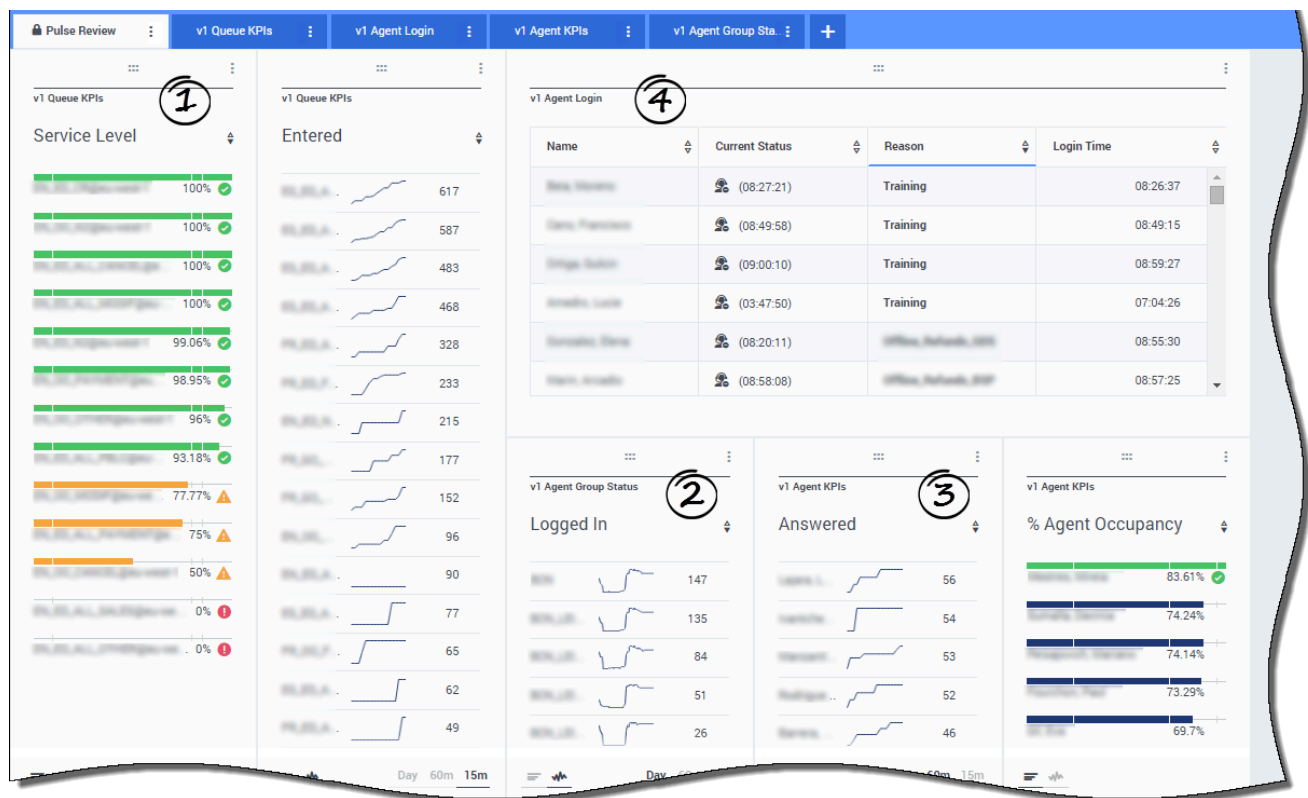
What reports do I want to see?

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## What reports do I want to see?

You can include the popular real-time reports in your default dashboard, so you can quickly start monitoring your contact center. First you need to decide what you want to know about your contact center.

### What do I want to see in my Genesys Pulse dashboard?



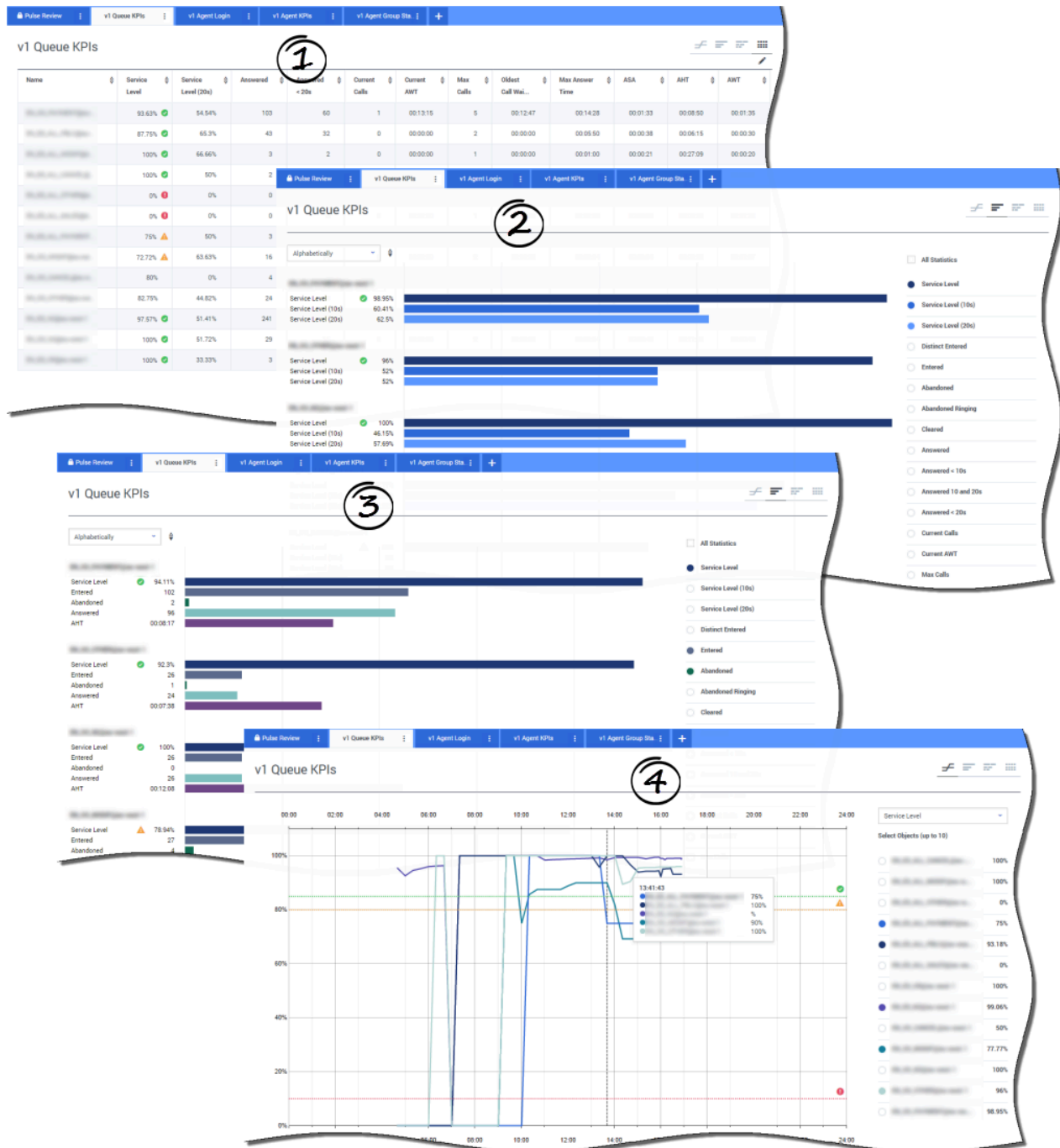
Supervisors need to know at-a-glance what is happening in their contact center. Genesys Pulse displays these reports in widgets, which can easily be expanded to dashboard size as grid, bar, and line charts.

Most often supervisors ask the following:

1. Will we meet our operational targets?
2. How can I manage agent workload across different teams?
3. How are my agents performing?
4. Are my agents properly assigned?

What reports do I want to see?

Will we meet our operational targets?



You can quickly analyze all call activity to determine any action that is needed to reach your target from the **Queue KPI** report. Similarly, you can analyze chat activity through the **Chat Queue KPI** report.

## What reports do I want to see?

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A key performance indicator (KPI) in a contact center is often related to abandoned interactions, so it is critical to have a comprehensive understanding of why contacts abandon (for example, lengthy wait times).

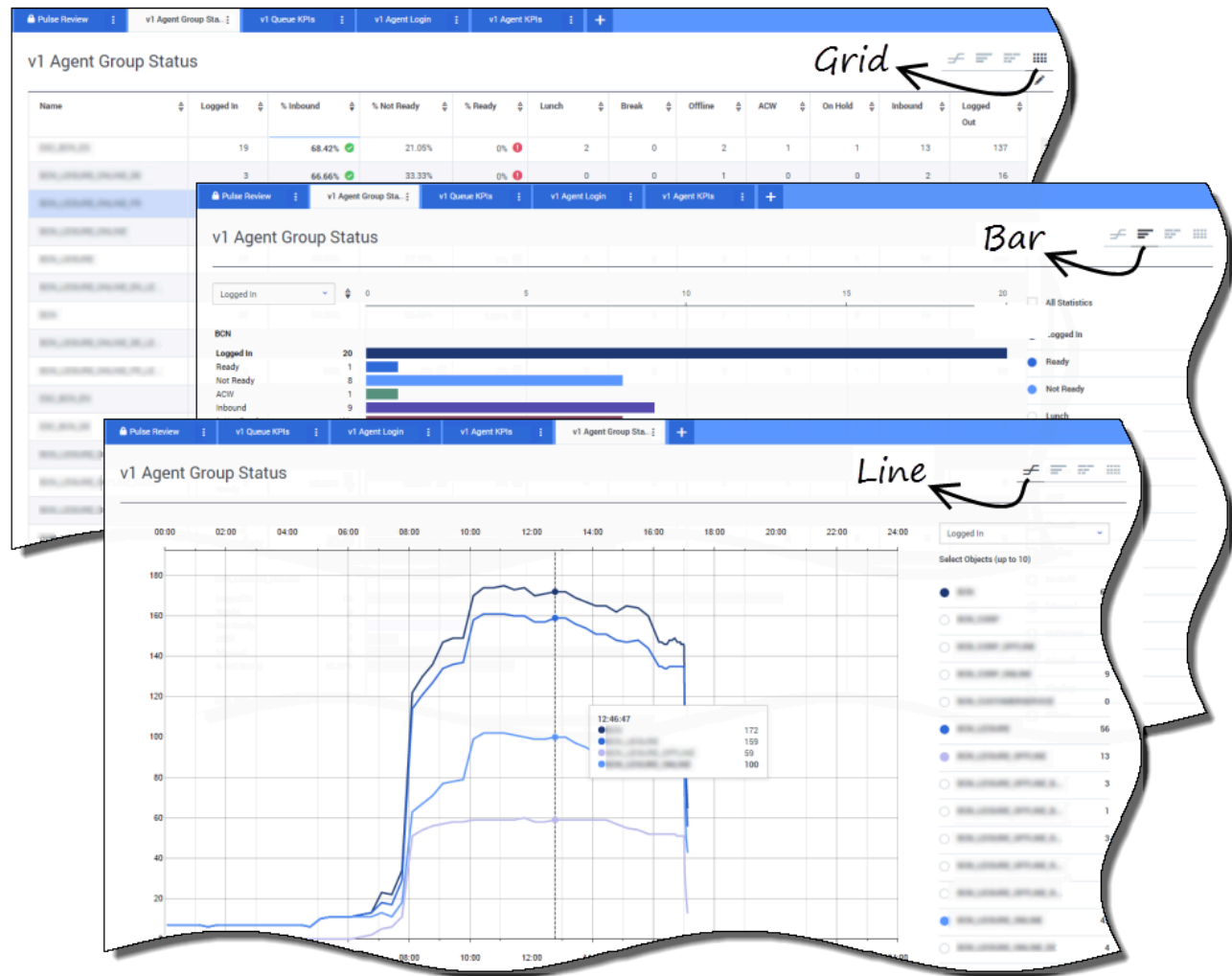
Contact center management develops the criteria or level of service that their customers expect. This report provides the primary view used to determine if the contact center is meeting those established operational targets.

In the examples, the reports show KPIs (for example, Service Level, Calls Answered, Current Calls in queue, ASA, and AHT) for each segment (Virtual Queue related to customer business):

1. The grid chart helps you identify how to configure specific thresholds based on your SLA.
2. The first bar chart shows the Service Level performance with a better granularity and identify times when the service level could be degraded.
3. The second bar chart shows the Service Level performance and other KPIs to measure the call distribution performance.
4. The line chart shows the Service Level trend within the current day.

What reports do I want to see?

How can I manage agent workload across different teams?



In order to manage the workload across different teams, supervisors can monitor their employee availability and behavior in the **Agent Group Status** reports. This provides supervisors an at-a-glance view of available staff and their current states. For example, you can see what percentage of agents are on calls, on hold, waiting for calls, or not ready with reason.

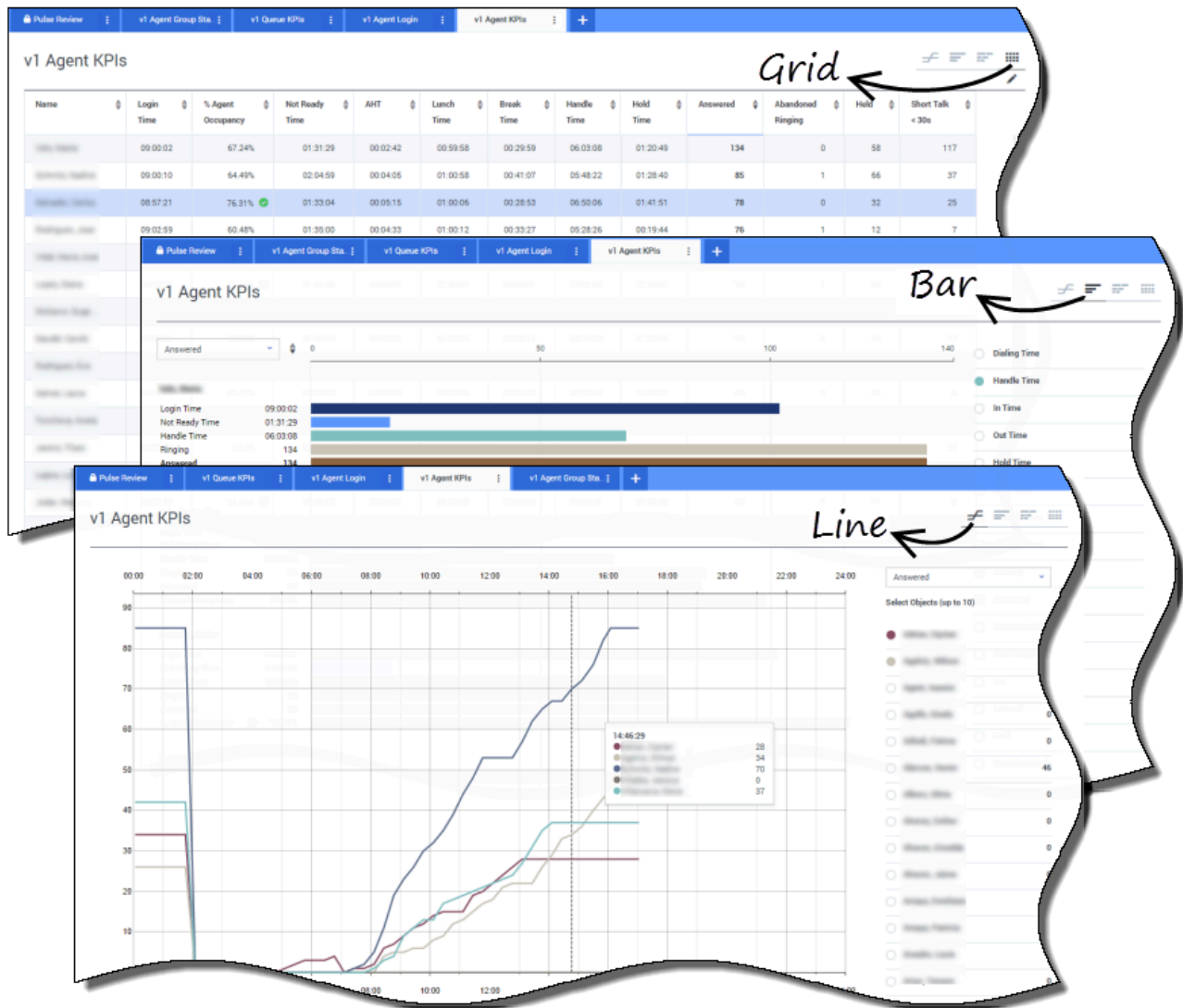
In the expanded view:

- The grid chart KPIs and the current status of your workforce.
- The bar chart shows the distribution of agent status for each team.
- The line chart helps you compare the trend of agents logged in for each team.



What reports do I want to see?

How are my agents performing?



You can see the KPIs of an agent group in your contact center in the **Agent KPI** reports. You can analyze other media-specific activity from the **Chat Agent KPI** and **Email Agent KPI** reports.

Agents manage many transactions and states in addition or related to answered calls. Genesys Pulse shows you all the data in a single report to provide supervisors with an understanding of agent performance based on the first call resolution. For example, you can see transfers compared to the number of calls answered, which can indicate unresolved first contact customer inquiries.

In the expanded view:

- The grid shows Agent KPIs and the current status of your workforce.
- The bar chart shows agent status and activity. Supervisors can sort agents by specific interests. For

What reports do I want to see?

example, the supervisor can sort agents by calls answered.

- The line chart compares the trend of calls answered by each agent.

Are my agents properly assigned?

**v1 Agent Login**

Name	Current Status	Time in Status	Reason	Login Time	Employeeid	Place	Switch	Loginid
John Doe	(08:33:06)	08:33:06	Training	08:32:38	John Doe	John Doe	John Doe	John Doe
John Doe	(08:55:43)	08:55:43	Training	08:55:15	John Doe	John Doe	John Doe	John Doe
John Doe	(09:05:55)	09:05:55	Training	09:05:27	John Doe	John Doe	John Doe	John Doe
John Doe	(08:25:56)	08:25:56	Office: Mobile 201	09:01:30	John Doe	John Doe	John Doe	John Doe
John Doe	(09:03:53)	09:03:53	Office: Mobile 201	09:03:26	John Doe	John Doe	John Doe	John Doe

**v1 Agent Login**

Name	Current Status	Login Time	Employeeid	ANI	DID	DNIS	Brand	Market	Service
John Doe	(00:08:33)	06:53:24	John Doe	Restricted	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:01:45)	09:14:39	John Doe	Restricted	John Doe	John Doe	FR	FR	John Doe
John Doe	(00:01:12)	09:05:29	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:02:29)	08:51:46	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:02:15)	08:58:57	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:02:07)	09:04:44	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:03:15)	08:58:30	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:11:23)	09:02:19	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:00:16)	09:03:54	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:01:09)	07:20:06	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:00:02)	07:04:44	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:02:20)	08:02:09	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:01:00)	06:57:35	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:01:36)	09:02:11	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe
John Doe	(00:01:04)	06:59:04	John Doe	John Doe	John Doe	John Doe	ES	ES	John Doe

You need to make sure that all aspects of your business are covered. You can see your individual agent properties, status, and the media they manage in the **Agent Login** report. With this report, supervisors can ensure the agents are logged in where they should be and managing the media for which they are responsible.

In the examples:

- The first grid shows the reason why agents in a specific group are not ready.
- The second grid shows the properties related to the call currently handled by agents. It includes 4 KVPs: Service Type, Service Sub Type, Customer Segment and Business Result.

How do I add reports to my dashboard?

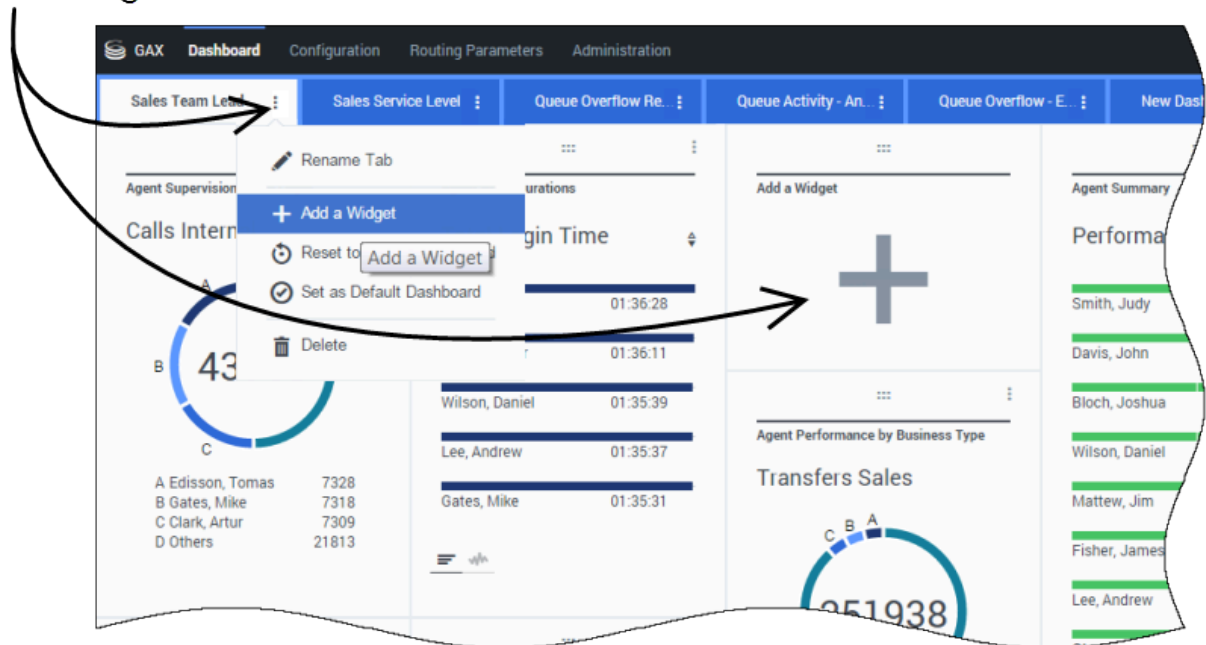
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## How do I add reports to my dashboard?

It's easy to add a new report within a Genesys Pulse widget. Genesys Pulse provides a basic set of predefined templates, complete with statistics that are typical for reporting activities handled by Genesys solutions. Any users with the appropriate privileges can create or modify widgets and templates.

How do I add reports to a dashboard?

*add a widget*



There are two ways you can add a report to your dashboard:

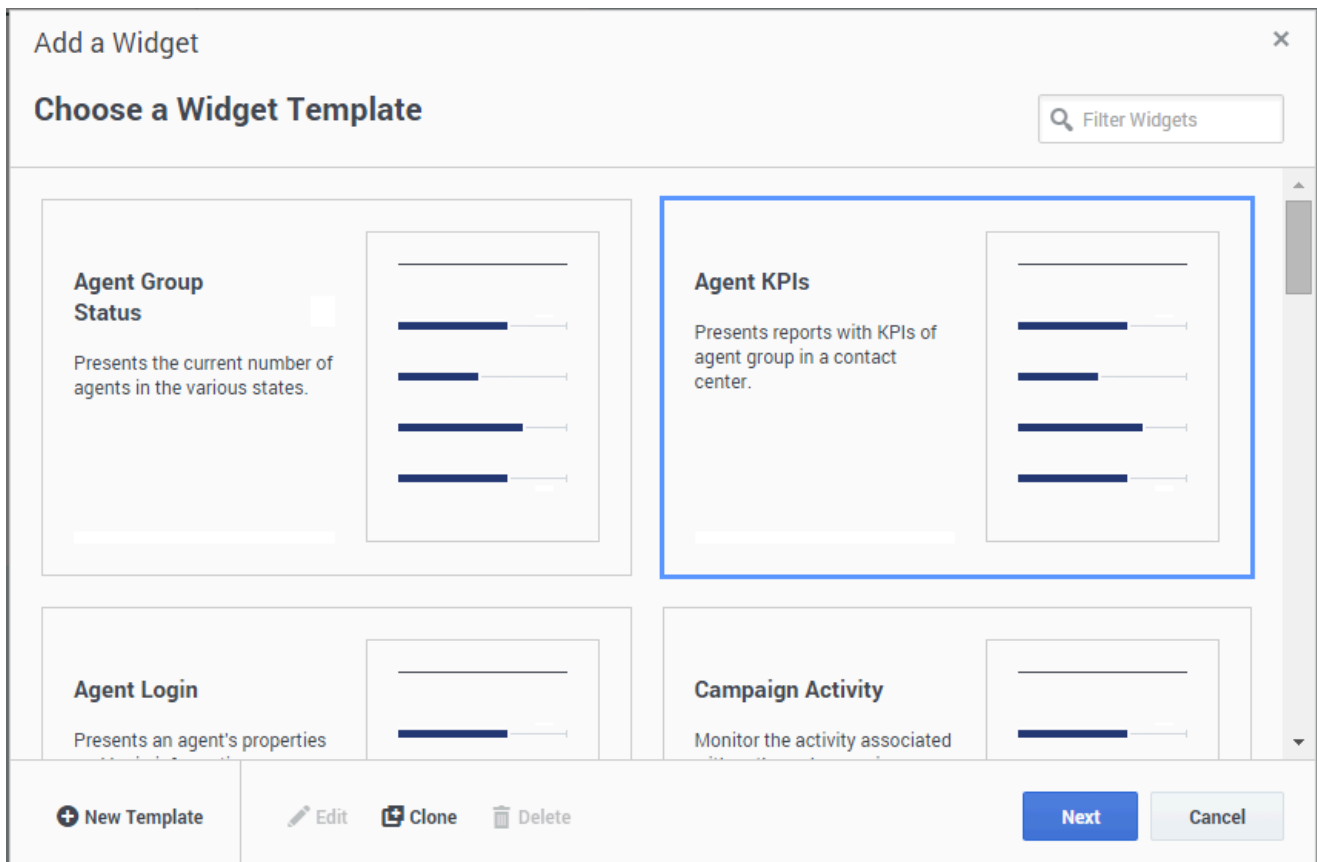
- Click on the more icon in the right corner of the dashboard and click **Add a Widget**.
- Click on the **Add a Widget** icon on the dashboard.

Genesys Pulse opens a widget wizard to help you add a report.

How do I add reports to my dashboard?

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How do I use the widget wizard?



The widget wizard guides you through the process of creating or changing widgets. Choose a predefined widget template or **define your own template**.

To create a Genesys Pulse template, you must add or configure:

- One or more object types to measure.
- One or more statistics.
- One widget type with specific display options.



How do I add reports to my dashboard?

How do I choose statistics?

The screenshot shows the 'Add a Widget' dialog box with the 'Statistics' tab selected. On the left, a list of statistics is shown with checkboxes: 'All Statistics' (checked), 'Login Time' (checked), 'Ready Time' (checked), 'Not Ready' (checked), 'Not Ready Time' (checked), 'Lunch Time' (checked), 'Break Time' (checked), 'ACW Time' (checked), and 'In Handle Time' (checked). Below the list are 'Up' and 'Down' buttons. On the right, the details for the selected 'Login Time' statistic are displayed. The details include a description, an alias, notification mode, statistic type, display format, notification frequency, and a filter.

Alias	Display Format
Login_Time	Time

Notification Mode	Notification Frequency, seconds
Time-Based	60

Statistic Type	Filter
Total_Login_Time	VoiceCall

Previous Next Cancel

Choose the statistics that you want to include in your widget. You must add at least one non-string statistic.

Genesys Pulse displays statistic details when you select a statistic. You can modify a statistic definition within Genesys Pulse when you create, clone, or edit a template.

Genesys Pulse statistics are described in detail in the [templates.xls](#) file.

How do I add reports to my dashboard?

What display options should I use?

**Add a Widget**

**Display Options**

**Widget Title \***  
Agent KPIs

**Widget Type**  
List Widget

**Size**  
☒ 1x2 ☐ 1x3 ☐ 1x4

**Widget refresh rate**  
60 seconds

**Headline Type**  
☒ Statistics ☐ Objects

**Widget Preview**

Agent KPIs

Login Time

Parker, Charlie	00:14:37
Miller, Gleen	00:11:04
Doe, Jane	00:08:10
Doe, John	00:06:05
, PersonQ	00:02:18

Previous Finish Cancel

You need to define the default display settings for your widget. Users can change these options on their own dashboard.

- Provide a name for report title.
- Select the **Widget Type** to display.
- Select the Widget refresh rate.
- Select options associated with the visualization (for example, alerts and size).
- Optional: For templates configured to use changes-based statistics (CurrentStatus and ExtendedCurrentStatus), set **enable quick updates**. See [Deploying RabbitMQ for Quick Widget Updates](#).
- If needed, select the **Alerts for statistic** and define the alert values (from 1 to 3).

### Important

Confirm your environment can handle the number of widgets and refresh rate you

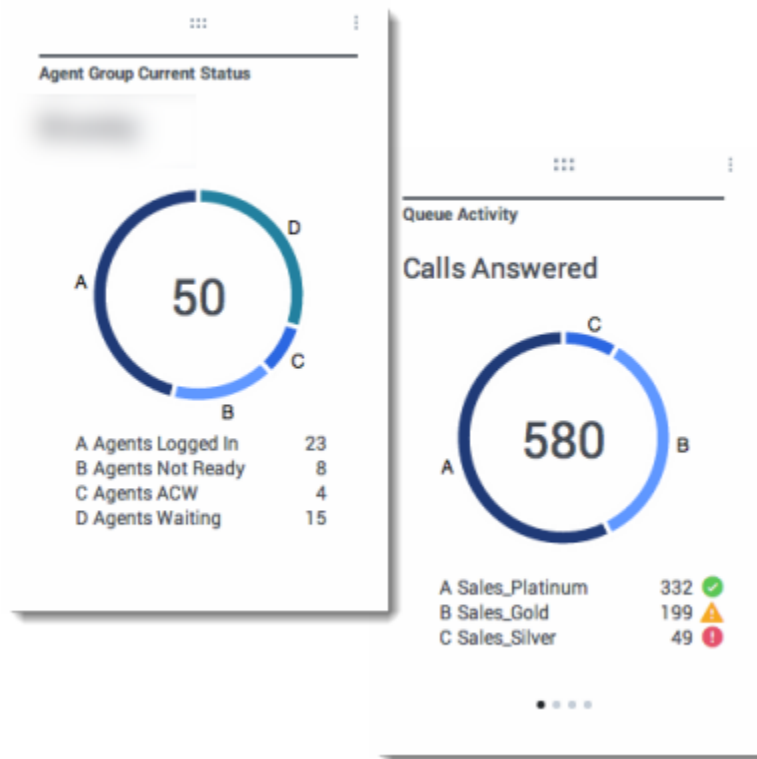
plan to use. A shorter refresh rate increases demands on the CPU, Memory, Disk, and Network.



## How do I choose a Widget type?

The widgets on the Genesys Pulse dashboard display charts that provide an at-a-glance view of what is happening in your contact center. The best way to choose a widget type is to preview the widget when you add a new widget. This allows you to see which widget type best displays what you want to see in your report.

### What do I see in a Donut widget?



A Donut chart shows a proportional representation of the parts of a whole sample, similar to a pie chart.

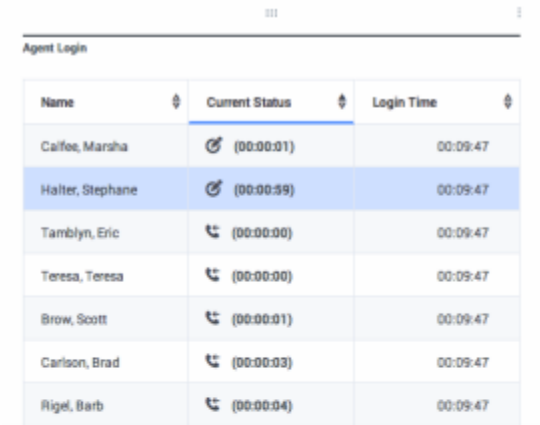
The Donut widget displays either:

- one statistic for four specific objects
- one statistic for three top objects and a sum the remaining objects
- one object with the values of four defined statistics

Depending on the reference selected in the Cycle By option, a carousel can be defined to display

additional several items.

What do I see in a Grid widget?



The screenshot shows a Grid widget titled "Agent Login". It contains a table with three columns: "Name", "Current Status", and "Login Time". The table lists eight agents with their current status and login time. The second row, "Halter, Stephane", is highlighted in blue.

Name	Current Status	Login Time
Calfee, Marsha	(00:00:01)	00:09:47
Halter, Stephane	(00:00:39)	00:09:47
Tamblyn, Eric	(00:00:00)	00:09:47
Teresa, Teresa	(00:00:00)	00:09:47
Brow, Scott	(00:00:01)	00:09:47
Carlson, Brad	(00:00:03)	00:09:47
Rigel, Barb	(00:00:04)	00:09:47

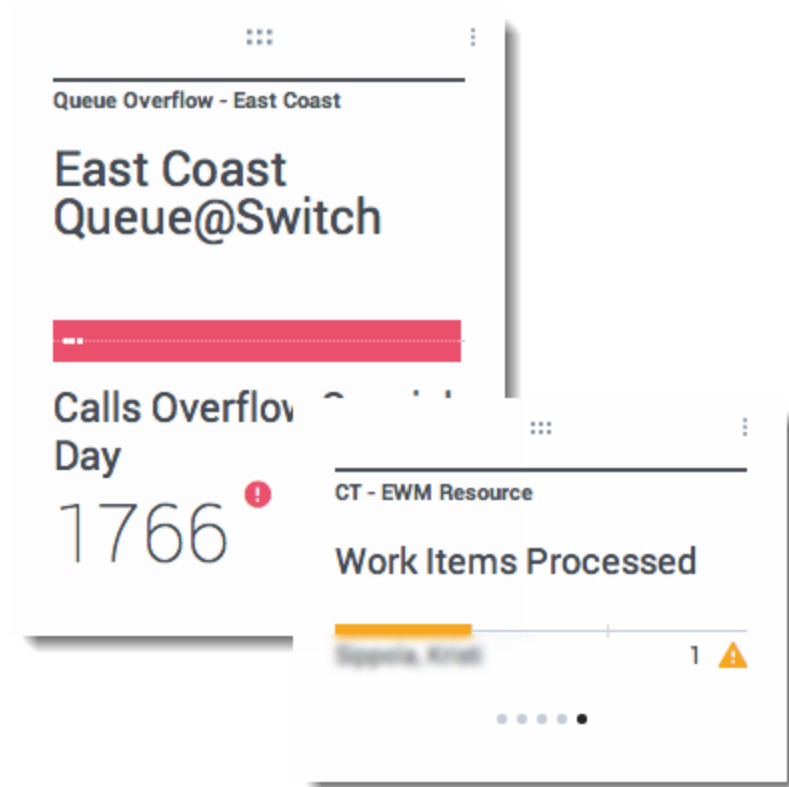


The screenshot shows a Grid widget titled "CT - ERM Resource". It contains a table with four columns: "Name", "Work Items Processed", "Calls Processed", and "Avg Processing Time". The table lists five resources with their respective statistics. The "Work Items Processed" column includes a small icon (yellow triangle or green circle) next to the count.

Name	Work Items Processed	Calls Processed	Avg Processing Time
Sippola, Kristi	1 (yellow triangle)	0	00:11:42
Chanel, Monique	3 (green circle)	0	00:36:21 (green circle)
Milburn, Kristen	1 (yellow triangle)	0	00:12:26
Hammond, Steve	0 (red circle)	0	00:00:00 (red circle)
McDaddy, Trevor	0 (red circle)	0	00:00:00 (red circle)

The Grid widget displays a list of items and their related statistics.

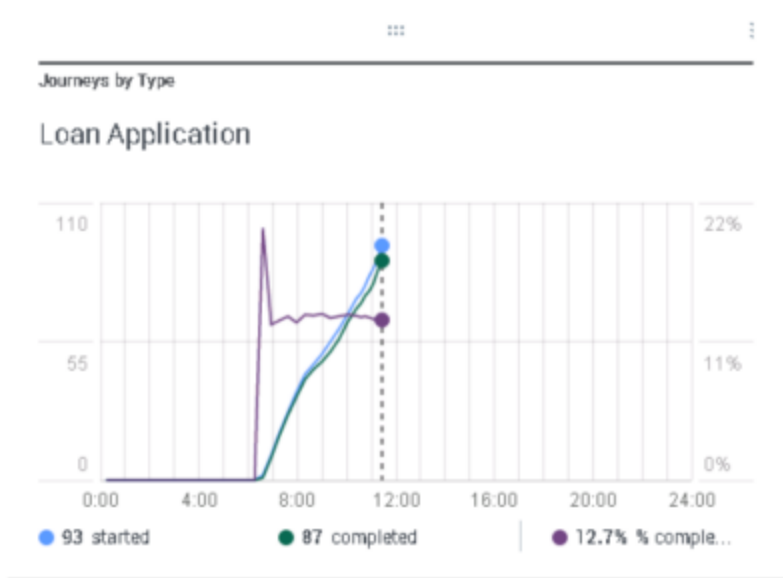
What do I see in a KPI widget?



The KPI Widget displays either one statistic for several objects or several statistics for one object, depending on the value of the Cycle By option. The Cycle By option is available if the widget has objects selected individually, not by group.

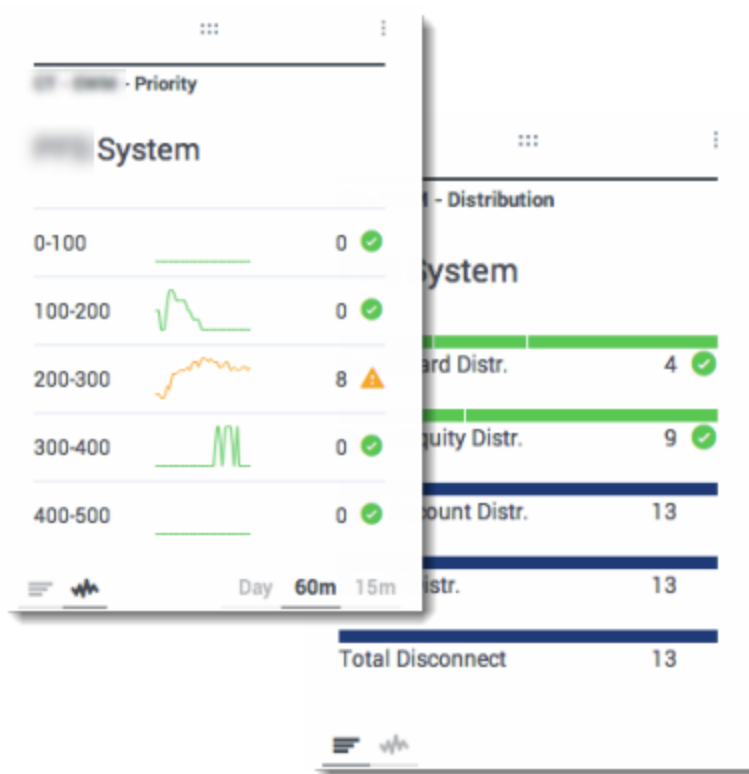
**Note:** The maximum value for the bar charts in KPI widgets is the maximum value of all the objects selected for the statistic in this widget or maximum value of the alert configured for this widget.

What do I see in a Line Chart widget?



The Line Chart widget displays statistics as a series of data points connected by lines.

What do I see in a List widget?



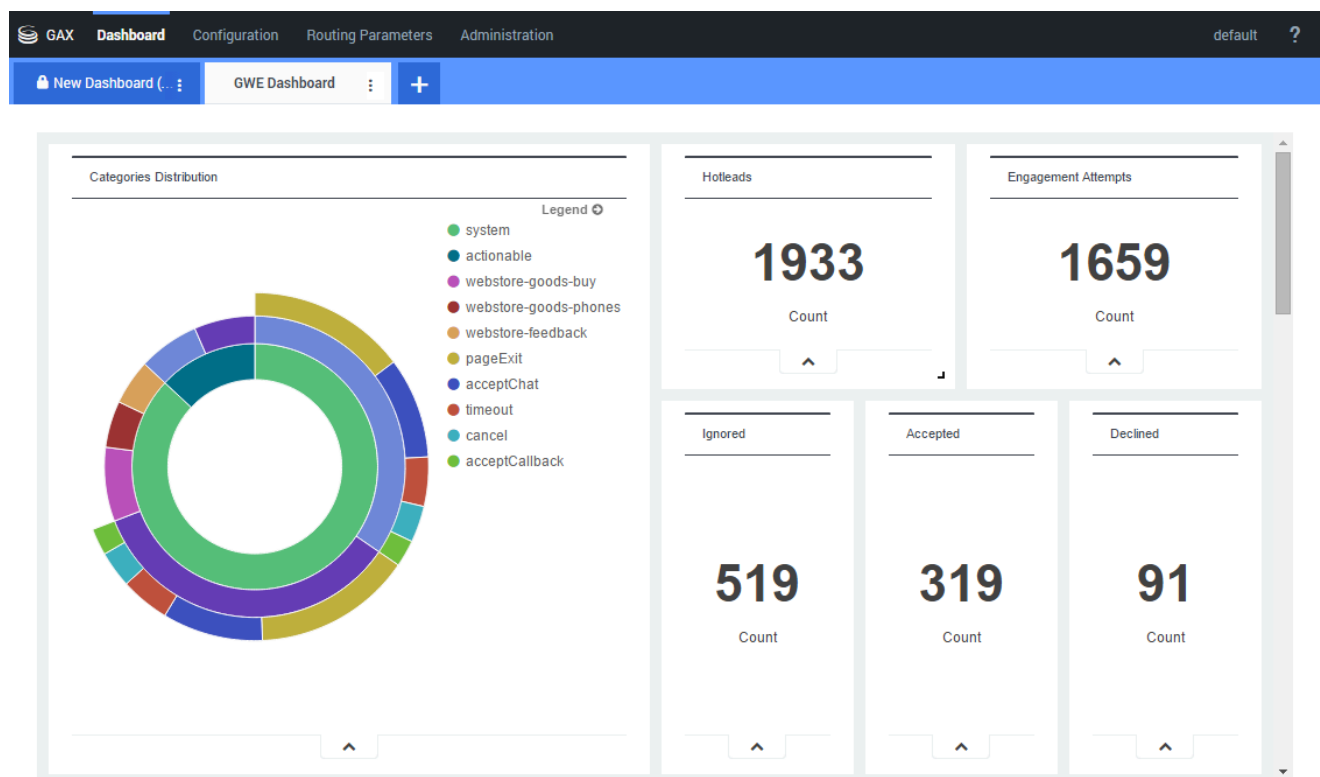
The List widget displays either one statistic for many objects or many statistics for one object. Depending on the reference selected, the Headline type option might be available for this widget type.

**Note:** The maximum value for the bar charts in List widgets is the maximum value of all the objects selected for the statistic in this widget or maximum value of the alert configured for this widget.

## How do I display external content?

You can use an IFRAME widget to show content from an external URL on your Genesys Pulse dashboard. You may want to adapt your external content before you try to display what you want within Genesys Pulse. Genesys Pulse doesn't actually change anything within iFrame, but will provide scrollbars if the content is larger than the available area.

### Using IFRAME widgets to display external content



**Add a new widget** and select the IFRAME template.

For an IFRAME widget, you need a web address for the **Dashboard Widget URL**. You may want to use a second web address for the **Maximized Widget URL** content, because widgets expanded to the size of the dashboard can display much more detail in charts than a regular dashboard widget can.

### [+] IFRAME Widget Options

The available display options for IFRAME widgets include the following:

- **Widget Title**—The title appears at the top of your widget. Use this to identify the content of the

widget.

- **Size**—The width and height ratio of your widget.
- **Allow resize**—Allow users to resize the widget.
- **Widget refresh rate**—The amount of time, in seconds, Genesys Pulse waits to update the widget content.
- **Dashboard Widget URL**—The web address of the content you want to display in your widget.
- **Maximized Widget URL**—The web address of the content you want to display in your expanded widget.
- **Automatic refresh**—Allows Genesys Pulse to automatically refresh the content as defined in the widget refresh rate.

### Tip

Here is an example of an IFRAME html page including instructions within a README file:

- [IFRAME example \(ZIP\)](#).

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# How can I use templates to simplify widget creation?

Did you know that you can create and use Genesys Pulse templates to simplify widget creation? Any users with the appropriate privileges can create or modify templates. You can then create various widgets using your template.

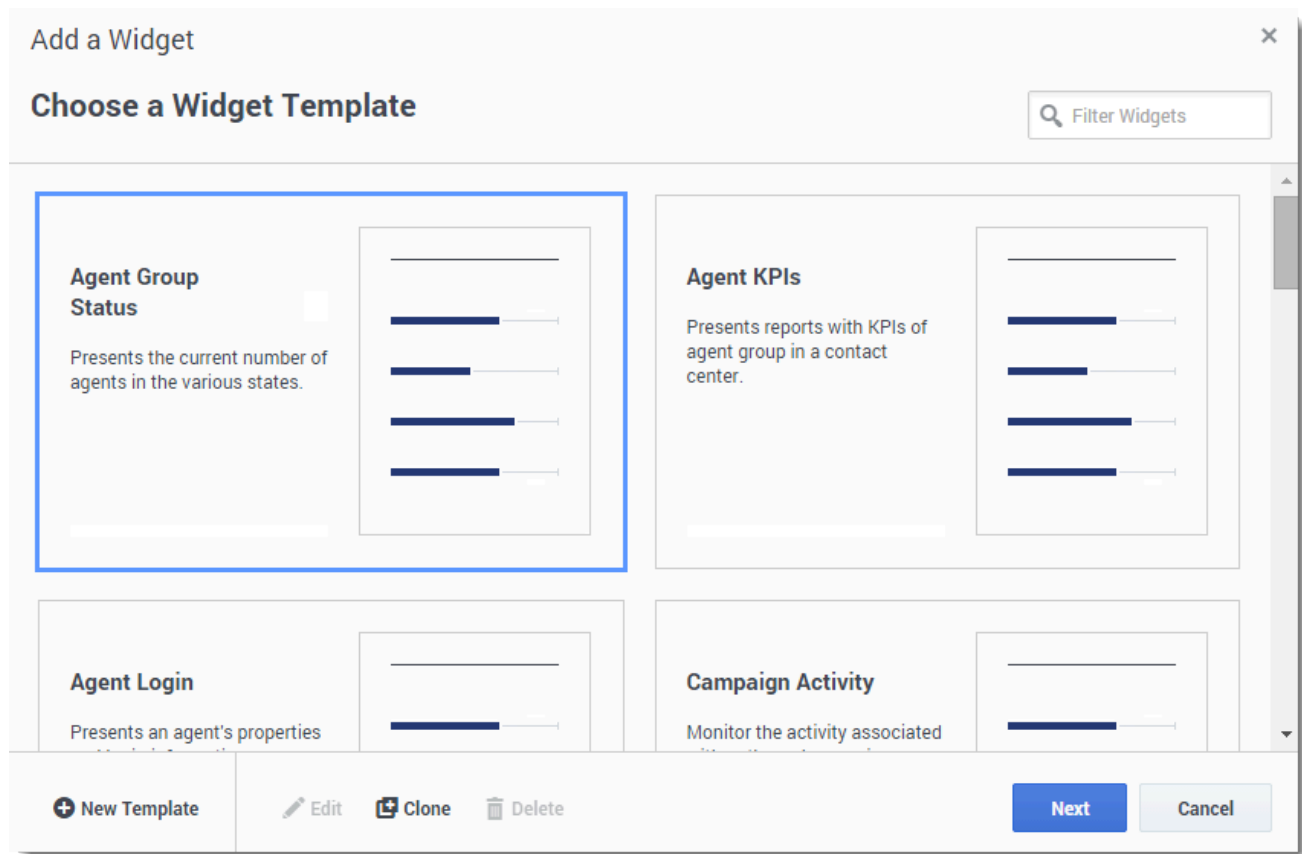
The easiest way to create a template is to clone and edit an existing template within Genesys Pulse. Genesys Pulse provides a basic set of predefined templates, complete with statistics that are typical for reporting activities handled by Genesys solutions. Any users with the appropriate privileges can create or modify the available templates.

## Important

You can edit only user-created templates. Pulse overwrites any changes made to predefined templates with the original predefined templates every time Pulse starts, unless you set the `install_templates` configuration option in the `[pulse]` section of the GAX Application object to `false`.



## How do I Add, Clone, or Edit a template?



The template wizard guides you through the process of creating, changing, and deleting templates. To open the template wizard, click **Add Widget** and select **New Template**. The **Choose a Widget** screen displays an alphabetical list of Genesys Pulse templates.

To create a Genesys Pulse template, you must add or configure:

- One or more object types.
- One or more statistics.
- One widget type with specific options to display the information.

## What template details do I need?

The screenshot shows a 'Clone a Template' dialog box with a 'Details' tab. The dialog has a title bar with a close button (X). The 'Details' section is divided into three main areas. On the left, there is a 'Template Name' field with the text 'Agent KPIs' and a 'Description' text area containing the text 'Presents reports with KPIs of agent group in a contact center'. On the right, there is a section titled 'Allowed Object Types' with a list of checkboxes. The checked items are 'Agent', 'Place', 'Agent Group', and 'Place Group'. The unchecked items are 'Calling List', 'Campaign Calling List', 'DN', 'Queue', 'Routing Strategy', 'Switch', 'Work Bin', 'Campaign', 'Campaign Group', 'DN/Queue Group', 'Routing Point', 'Staging Area', and 'Tenant'. At the bottom right of the dialog are 'Next' and 'Cancel' buttons.

**Clone a Template**

**Details**

**Template Name \***

Agent KPIs

**Description**

Presents reports with KPIs of agent group in a contact center

**Allowed Object Types \***

- ☒ Agent
- ☐ Calling List
- ☐ Campaign Calling List
- ☐ DN
- ☒ Place
- ☐ Queue
- ☐ Routing Strategy
- ☐ Switch
- ☐ Work Bin
- ☒ Agent Group
- ☐ Campaign
- ☐ Campaign Group
- ☐ DN/Queue Group
- ☒ Place Group
- ☐ Routing Point
- ☐ Staging Area
- ☐ Tenant

**Next** **Cancel**

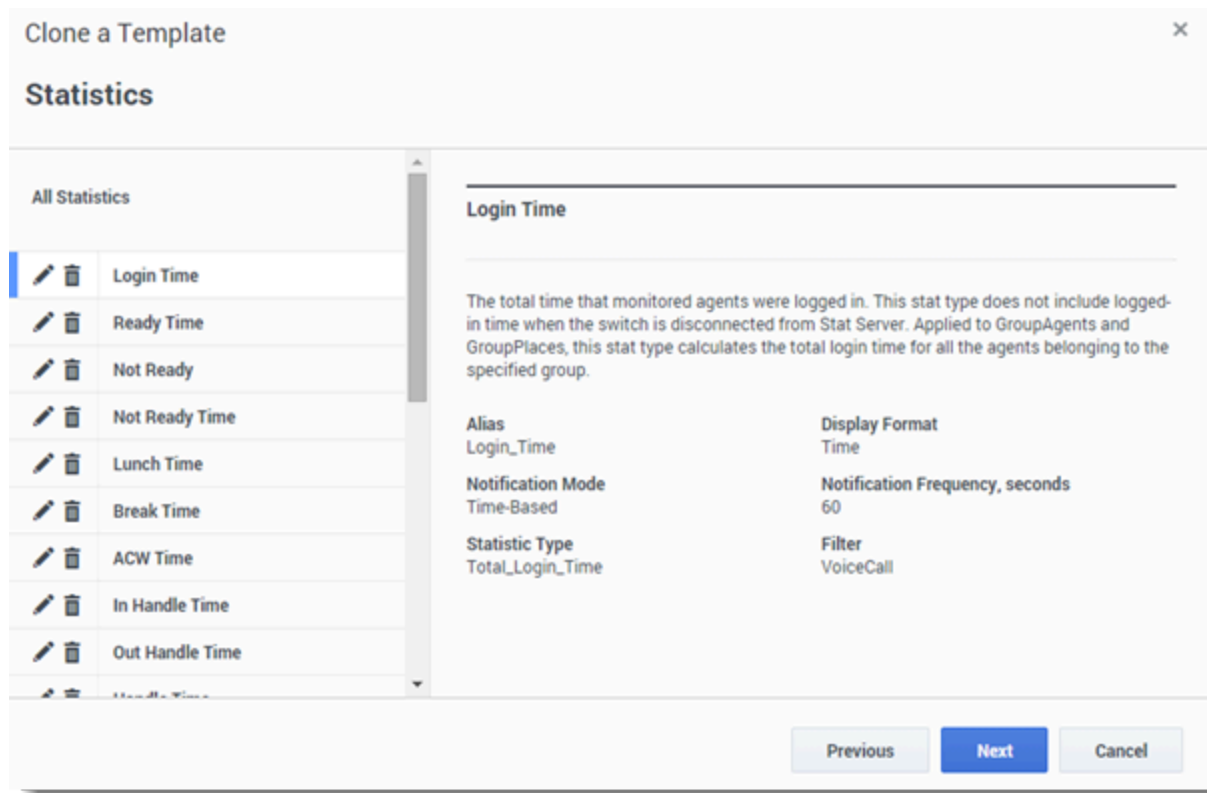
On the **Details** screen, you:

- Define the name of the new template
- Describe the scope of this template
- Select one or more object types from the selection based on what you might want to monitor.

Genesys Pulse allows you to select objects that are compatible with your template. For example:

- The **Agent KPI** template includes the **Agent**, **Agent Group**, **Place**, and **Place Group** objects.
- The **Agent Group Status** template includes the **Agent Group** and **Place Group** objects.

## How do I select statistics?



Within the Genesys Pulse statistic definition, you can specify statistic parameters regardless of whether or not they are available on any StatServer in your environment. This means you must also update the StatServer options to ensure that the StatServer connected to Genesys Pulse contain the corresponding options (for example, statistic types and filters).

You must add at least one non-string statistic.

Choose the statistics and **properties** to include in your template. Genesys Pulse statistics are described in detail in the **templates.xls** file.

Genesys Pulse displays statistic details when you select a statistic. This information includes the components of the stat type definition and other parameters that form the request that Genesys Pulse sends to Stat Server. You can modify a statistic definition within Genesys Pulse when you create, clone, or edit a template.

## How do I define the display options?

**Clone a Template**

**Display Options**

**Widget Title \***  
Queue Distribution

**Widget Type**  
List Widget

**Size**  
☒ 1x2 
 ☐ 1x3 
 ☐ 1x4

**Headline Type**  
☒ Statistics 
 ☐ Objects

**Headline Statistic \***  
Calls Waiting

**Sort**

**Widget Preview**

Queue Distribution

**Calls Waiting**

VQ_Waiting_for_agent@SI...	914
Billing_Gold@SIP_Switch	609
VQ_CallCenter@SIP_Switch	473
SIP_VQ@SIP_Switch	336
Billing_Platinum@SIP_Switch	64

Previous Finish Cancel

The final step before validating your template is to define what should be the default display of your widget on the main dashboard. This setting is the one displayed to Genesys Pulse users, but they can then modify the widget options on their own dashboard.

- Name the widget title
  - Select the **Widget Type** to display.
- Note:** The maximum value for the bar charts in List and KPI widgets is the maximum value of all the objects selected for the statistic in this widget or maximum value of the alert configured for this widget.
- Select the Widget refresh rate.
  - Select options associated with the visualization (for example, thresholds and size).
  - Optional: For templates configured to use changes-based statistics (CurrentStatus and ExtendedCurrentStatus), set **enable quick updates**. See [Deploying RabbitMQ for Quick Widget Updates](#).
  - If needed, select the statistics for alerts and define the alert values (from 1 to 3).

### Important

Confirm your environment can handle the number of widgets and refresh rate you plan to use. A shorter refresh rate increases demands on the CPU, Memory, Disk, and Network.

---

# What are the statistic properties?

When you select a statistic within the **template wizard**, Genesys Pulse displays the values of the statistic properties. These statistic properties are described below.

## Tip

You can modify a statistic definition while defining a template. Genesys Pulse statistics are described in detail in the **templates.xls** file.

## Alias

The Alias must be a unique name that represents the technical name of the statistic. Use an ASCII letter for the first character.

## Display Alias

The Display Alias is the name displayed on the report.

## Description

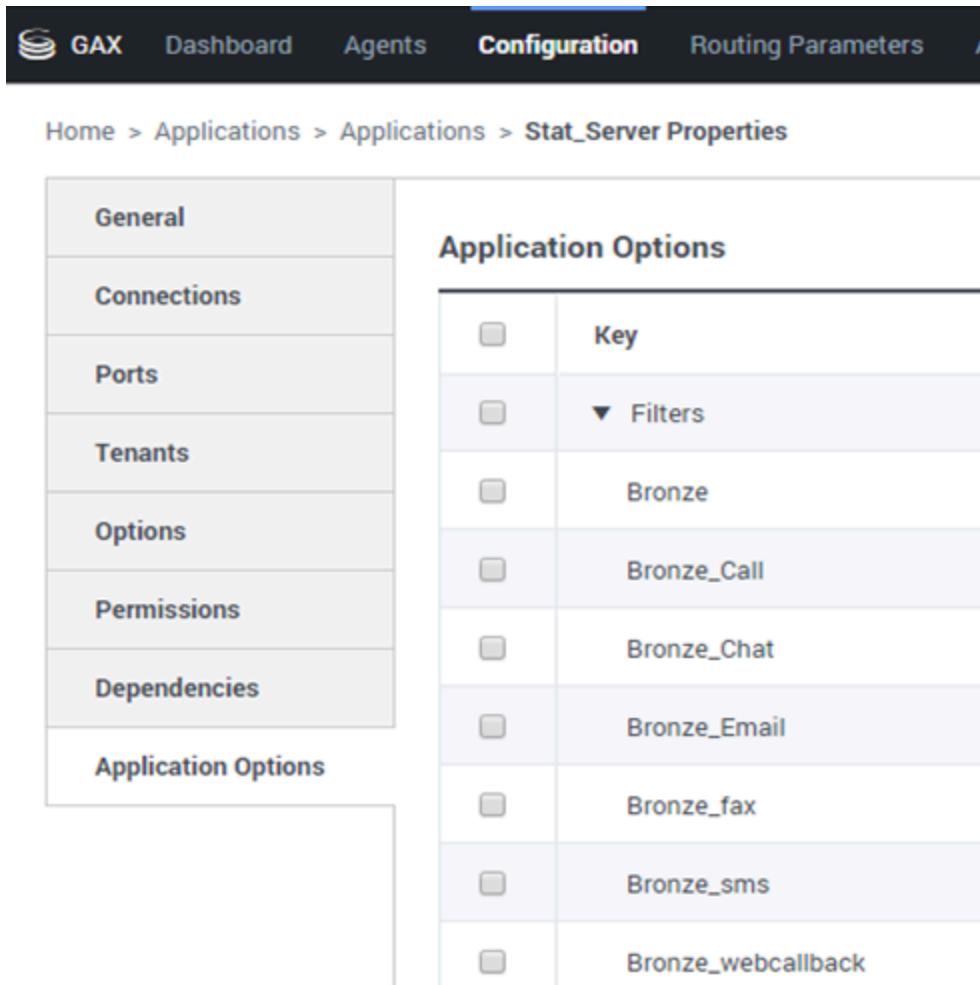
The Description provides the functional meaning of the statistic.

## Display Format

The Display Format specifies whether values are shown as time or numbers, and, if numbers, the number of decimal places. Depending on the statistic you chose, the available formats in the drop-down list are time-based or numerical.

**List of Values:** Time, Integer, Number, Percent, String

## Filters



The Filters represent statistical filters that define restrictive conditions on actions used while calculating the statistic. See the "Statistical Categories" chapter in the [Framework Stat Server User's Guide](#) to learn how to define filtered statistics.

The list of Filters is available in the Configuration section of GAX. This view is available in Stat Server application options used by Genesys Pulse.

Your account must have privileges to access this section.

Within GAX, you can add, edit or delete a filter.

**Filters Example** Suppose that you want to filter calls based on language: If the enterprise set up the key Language to identify language and the value Spanish for callers who speak Spanish, you could use the PairExists UserData function to search for calls with attached data in the Language/Spanish key-value pair.

On the Options tab of the Stat Server Properties screen, you could add a SpanishLanguage option in

the [Filters] section and specify filtering for calls with attached data containing the key "Language" and the value "Spanish".

The example would have SpanishLanguage in the Name field and PairExists("Language","Spanish") in the Value field.

Now, when an agent attaches the "Spanish/Language" key-value pair to calls from a desktop application, the calls are filtered out of statistical calculations.

## Formula

**Clone a Template**

**Statistics**

**All Statistics**

		Current Calls	
		Entered	
		Abandoned	
		Cleared	
		Forwarded	
		Answered	
		Answered No Wait	
		Answered < 10s	

Up Down Add New

**Description**

**Display Format \***

Percent

☒ **Formula**

**Formula**

if ((Data.Outbound.Value + Data.Inbound.Value) != 0)  
Result = 100 \* Data.Outbound.Value / (Data.Outbound.Value +  
Data.Inbound.Value);  
else Result = 0;

Percentage

Save Cancel

Previous Next Cancel

From the statistic detail pane, you can create or customize statistics by creating a formula.

The formula uses a javascript-based syntax, which lets you calculate expressions with values given by other statistic and use functions provided by Genesys for more specific calculations. For example, you can calculate the ratio of the calls abandoned to the calls offered in your queue to measure the percentage of abandoned calls in your queue.

Genesys Pulse assumes the offered calls are defined by a statistic alias Offered and the abandoned calls are defined by a statistic alias Abandoned.

The formula must return a Result value to be valid and can access any statistics of the template with



---

the following syntax: `Data.<Statistic-Alias>.Value`

All formulas must contain an assignment for the `Result` variable (for example, `Result=`). The `Result` of the formula calculation is the final value of this variable.

For example, here is a formula using the function `G.GetAgentNonVoiceStatus()`:

```
Result = G.GetAgentNonVoiceStatus(Data.Current_Status.Value, email);
```

## Insensitivity

Insensitivity describes a condition for Stat Server to send updates of statistical values to its clients. An increase in the value of this parameter usually decreases network traffic, but it also reduces reporting accuracy, because values are not updated as frequently. This setting is not visible in Stat Server configuration, but rather, clients pass its value to Stat Server along with each statistic request.

Insensitivity plays no role for reset-based statistics. For time-based or change-based notification mode, Stat Server only reports the recalculated value if the absolute value of the difference between the previous value and the recalculated value or its percentage ratio to the recalculated value is at least equal to the number specified by Insensitivity.

For example, if the result has a long integer data type—as is the case for statistics measuring time—Stat Server uses the absolute difference in values for comparison. Given an Insensitivity setting of 5 in this case, Stat Server sends the recalculated result to its client when the absolute value of the difference between the new and old result is at least 5 (seconds, usually).

## Notification Mode

The Notification Mode determines when Stat Server sends updated statistical values. These are the valid options:

- **Time-Based**—Select this Notification Mode to instruct Stat Server to recalculate the statistic by the frequency displayed in Notification Frequency property. Stat Server sends a new value to Genesys Pulse only when the absolute difference from the last reported value exceeds the Insensitivity property.
- **Change-Based**—Select this Notification Mode to instruct Stat Server to notify Genesys Pulse about changes immediately.
- **No Notification**—Select this option to instruct Stat Server to not report updates. Updates are turned off in this case.
- **Reset-Based**—Select this Notification Mode to instruct Stat Server to report Genesys Pulse value right before setting it to zero (0). CurrentState statistics cannot be requested with Reset-Based notification mode.


## Notification Frequency

Use Notification Frequency to set how often, in seconds, Stat Server recalculates the statistic and

---

notifies Genesys Pulse if the statistic changes by more than the valued displayed in the Insensitivity field. This field is only used when a Time-Based Notification Mode is selected for the statistic.

## Statistic Type

 **GAX** [Pulse](#) [Agents](#) **[Configuration](#)** [Routing Parameters](#) [Administration](#)

Home > Applications > Applications > Stat\_Server Properties

General

Connections

Ports

Tenants

**Application Options**

### Application Options

<input type="checkbox"/>	Key	
<input type="checkbox"/>	▼ AbandCallsPercentage	
<input type="checkbox"/>	▼ AbandonedFromRinging	
<input type="checkbox"/>	▼ AbandTime	
<input type="checkbox"/>	▼ ACW_Time_Inbound	
<input type="checkbox"/>	▼ ACW_Time_Other	
<input type="checkbox"/>	▼ ACW_Time_Outbound	
<input type="checkbox"/>	▼ AgentLoginTime	
<input type="checkbox"/>	▼ AgentReadyTime	
<input type="checkbox"/>	▼ Agents_CurrentNumber	

The mandatory Statistic Type displays the parameters that define the statistic type within Stat Server.

The list of Statistic Types available in the environment should be accessible through the Genesys Administrator Extension (GAX) within the Configuration section. You can view them in the Application Options of the Stat Server application used by Genesys Pulse.

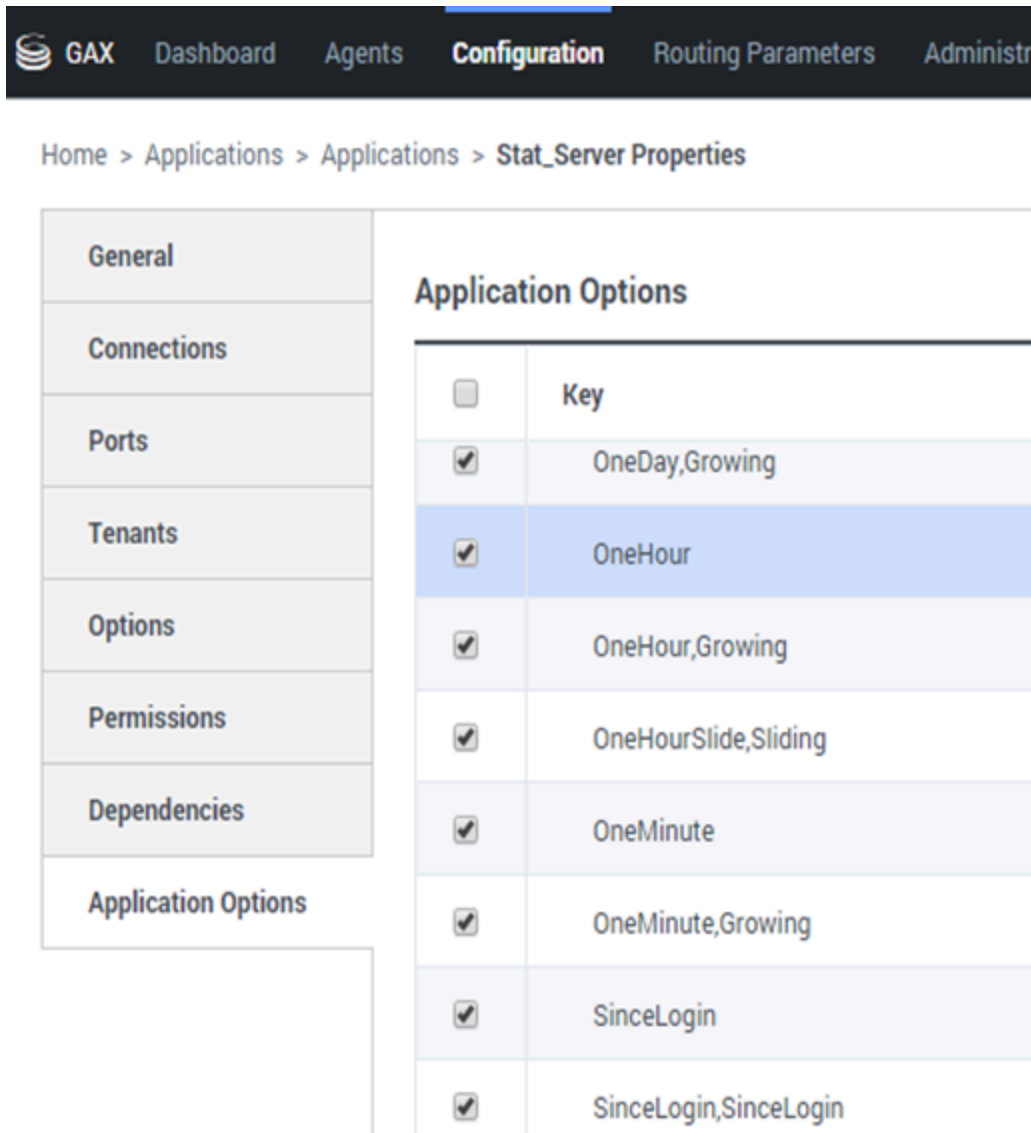
Your account must have privileges to access the Configuration section.

Within GAX, you can add, edit, or delete a statistic type.

This list should be the same as the list of statistic types detailed in the Genesys Pulse templates spreadsheet.

For more information on Stat Type definitions, see the [Framework Stat Server User's Guide](#).

## Time Profile



Key
<input type="checkbox"/> OneDay,Growing
<input checked="" type="checkbox"/> OneHour
<input checked="" type="checkbox"/> OneHour,Growing
<input checked="" type="checkbox"/> OneHourSlide,Sliding
<input checked="" type="checkbox"/> OneMinute
<input checked="" type="checkbox"/> OneMinute,Growing
<input checked="" type="checkbox"/> SinceLogin
<input checked="" type="checkbox"/> SinceLogin,SinceLogin

Use the Time Profile to define the Time Profile for the statistic and specify the interval over which historical aggregate values are calculated. All time profiles are defined as configuration options in the Time Profiles of the Stat Server Application object in Genesys Configuration. See the [Framework Stat Server User's Guide](#) for information about how to set up time profiles.

The list of Time Profiles available in the environment should be accessible in the GAX Configuration section. This view is available in Stat Server application options used by Genesys Pulse.

Your account must have privileges to access this section.

Within GAX, you can add, edit, or delete a Time Profile.

The Time Profile contains four main types:

- Growing
- Sliding
- Selection
- SinceLogin

### **Time Profiles Examples**

- Default,Growing—The Default time profile uses a Growing interval type and resets statistics to zero (0) every night at midnight. The default value is set to 00:00.
- LastHour,Sliding—The LastHour time profile uses a Sliding interval type and tracks the last hour of activity with a sampling taken every 15 seconds. The default value is set to 3600:15.
- SinceLogin,SinceLogin—SinceLogin resets statistics to zero (**0**) at the moment of agent login. Statistics continue to accumulate as long as the agent is logged into (any) DN. The SinceLogin interval type aggregates statistical data only for agent-object statistics.
- Shifts,Growing—A time profile named Shifts resets statistics to zero when shifts change at 3:00 AM, 7:00 AM, 11:00 AM, 1:00 PM, 7:00 PM, and 1:00 AM. The default value is set to 3:00 +4:00, 13:00 +6:00.

## Time Range

The screenshot shows the GAX Configuration page. The top navigation bar includes 'GAX', 'Dashboard', 'Agents', 'Configuration' (highlighted), and 'Routing Parameters'. Below the navigation bar, the breadcrumb trail reads 'Home > Applications > Applications > Stat\_Server Properties'. The main content area is divided into two sections. On the left is a sidebar menu with the following items: 'General', 'Connections', 'Ports', 'Tenants', 'Options', 'Permissions', 'Dependencies', and 'Application Options' (which is highlighted). On the right is the 'Application Options' section, which contains a table with a checkbox in the first column and a 'Key' in the second column. The table lists several time ranges, all of which are currently unchecked.

	Key
<input type="checkbox"/>	TimeRanges
<input type="checkbox"/>	EWT_Announce_TR
<input type="checkbox"/>	Less_3sec
<input type="checkbox"/>	Range0-10
<input type="checkbox"/>	Range0-120
<input type="checkbox"/>	Range0-15
<input type="checkbox"/>	Range0-20
<input type="checkbox"/>	Range0-30

The Time Range specifies when to collect data for a limited set of statistics. See the [Framework Stat Server User's Guide](#) for information about how to set up time profiles.

The list of Time Ranges is available in the Configuration section of GAX. This view is available in the options of the Stat Server application used by the Genesys Pulse solution.

Your account needs to have privileges to access this section.

Within GAX, you can add, edit, or delete a time range.

Time Ranges apply to statistics in following categories:

- 
- TotalNumberInTimeRange
  - TotalNumberInTimeRangePercentage
  - CurrentNumberInTimeRange
  - CurrentNumberInTimeRangePercentage
  - ServiceFactor1
  - TotalTimeInTimeRange

### **Time Range Example**

Suppose that you want to calculate the total number of calls answered within 30 seconds. To do so, enter Range0-30 in the Name field, and 0-30 in the Value field.

In this example, a Pulse statistic that calculates the total number of calls is based on the time range "Range0-30". If one call is answered after being in a queue for 25 seconds, a second call after 40 seconds, and a third call after 10 seconds, Stat Server counts only the first and third calls.

## How do I use Formulas to customize reports?

If you decide that one of your reports needs a different or additional statistic, you can edit the report's template to make that happen. You can accomplish this by adding a formula to the report template that retrieves the statistic or key performance indicator (KPI) you want.

Since you cannot change the standard templates provided, if you want to change one of the standard reports, just create a clone of the template and make changes in the new template.

Who can create these statistics? If you can create and edit Genesys Pulse templates, you can use formulas.

### Important

If you already know how to use the formulas, you can use [the function library](#) to help you create your formulas.



## Where can I add my formula?

The screenshot shows a 'Clone a Template' dialog box with a 'Statistics' tab. On the left, under 'All Statistics', there is a list of statistics: Current Calls, Entered, Abandoned, Cleared, Forwarded, Answered, Answered No Wait, and Answered < 10s. Each item has edit and delete icons. At the bottom of this list are 'Up', 'Down', and 'Add New' buttons. The main area on the right has a 'Description' text box, a 'Display Format' dropdown menu set to 'Time', a checked 'Formula' checkbox, and a 'Formula' text box. At the bottom right of the main area are 'Save' and 'Cancel' buttons. At the very bottom of the dialog are 'Previous', 'Next', and 'Cancel' buttons.

All Statistics		
	Current Calls	
	Entered	
	Abandoned	
	Cleared	
	Forwarded	
	Answered	
	Answered No Wait	
	Answered < 10s	

Up Down + Add New

Description

Display Format \*  
Time

☒ Formula

Formula

Save Cancel

Previous Next Cancel

From the statistic detail pane while editing a widget or template, you can create or customize statistics by creating a formula.

The formula uses a javascript-based syntax, which lets you calculate expressions with values given by other statistic and use functions provided by Genesys for more specific calculations. For example, you can calculate the ratio of the calls abandoned to the calls offered in your queue to measure the percentage of abandoned calls in your queue.

## How can I display percentages in my reports?

**Clone a Template**

**Statistics**

All Statistics

		Current Calls	
		Entered	
		Abandoned	
		Cleared	
		Forwarded	
		Answered	
		Answered No Wait	
		Answered < 10s	

Up Down Add New

Description

Display Format \*

Percent

☒ Formula

*Percentage* →

Formula

```
if ((Data.Outbound.Value + Data.Inbound.Value) != 0)
Result = 100 * Data.Outbound.Value / (Data.Outbound.Value +
Data.Inbound.Value);
else Result = 0;
```

Save Cancel

Previous Next Cancel

Let's say you want to display percentages based on two metrics. Just copy the following example using the statistics you want.

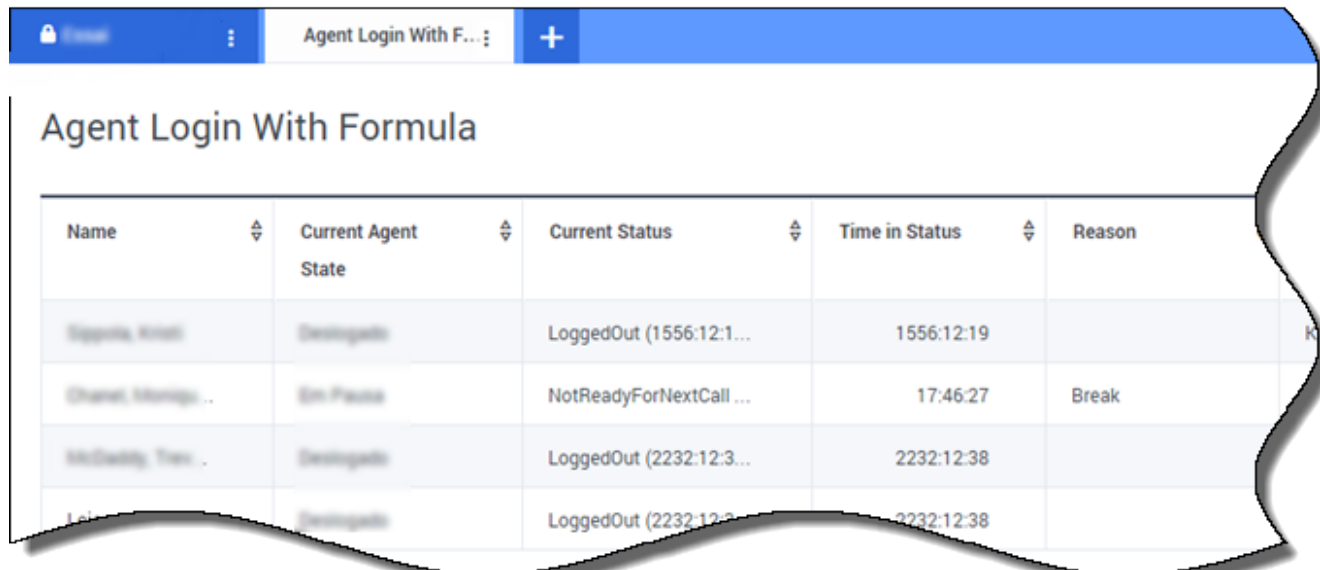
In this example, we want to retrieve the percentage of outbound calls out of the total of both inbound and outbound calls. The formula can access any statistic within a template with the following syntax: `Data.Statistic-Alias.Value`. The formula must return a valid `Result` value.

In the following formula, we assume the outbound calls are defined by a statistic alias `Outbound` and the inbound calls are `Inbound`.

### Formula: Calculate a Percentage

```
if ((Data.Outbound.Value + Data.Inbound.Value) != 0)
Result = 100 * Data.Outbound.Value / (Data.Outbound.Value + Data.Inbound.Value);
else Result = 0;
```

## How can I display Agent Status KPIs?



The screenshot shows a widget titled "Agent Login With Formula" with a table displaying agent status information. The table has five columns: Name, Current Agent State, Current Status, Time in Status, and Reason. The data rows show agents logging out or being on pause.

Name	Current Agent State	Current Status	Time in Status	Reason
Support, Kristi	Delegated	LoggedOut (1556:12:1...	1556:12:19	
Chanel, Monique ...	On Pause	NotReadyForNextCall ...	17:46:27	Break
McQuay, Tracy ...	Delegated	LoggedOut (2232:12:3...	2232:12:38	
Le...	Delegated	LoggedOut (2232:12:3...	2232:12:38	

Let's say you want to display KPIs for agent status. Just use the `Current_Status` statistic.

### [+] How the `Current_Status` statistic is defined.

The `Current_Status` statistic is defined by Stat Server options properties. The statistic type `ExtendedCurrentStatus` returns a specific object that can be further analyzed to provide only the Duration of the object.

```
[ExtendedCurrentStatus]
Category=CurrentState
MainMask=*
Objects=Agent
Subject=DNAction
```

You can use formulas to find the information you need:

### [+] Show agent time in current state

You can display the agent status duration using the `Current_Status` statistic.

**Formula: Get Status Duration**

```
Result = G.GetStatusDuration(Data.Current_Status.Value);
```

### [+] Show the Reason Code selected by the agent

You can display the reason code for the agent status.

#### Formula: Get Reason Code

```
Result = G.GetReasonCodes(Data.Current_Status.Value);
```

If you want to display more user data in addition to the Reason Code, you need to enable the Additional Data property (User Data) of the statistic and apply a formula to filter only the Reason Code from the resulting Current\_Status, which contains both the User Data and Reason code.

#### Formula: Filter only Reason Code

```
var res = G.GetReasonCodes(Data.Current_Status.Value);
var x = res.split(';');
Result = "";
for (var i = 0; i < x.length; i++) {
    var s = x[i];
    if (s.indexOf("Break") > -1 ||
        s.indexOf("Offline") > -1 ||
        s.indexOf("Training") > -1 ) { Result = s; break; }
}
```

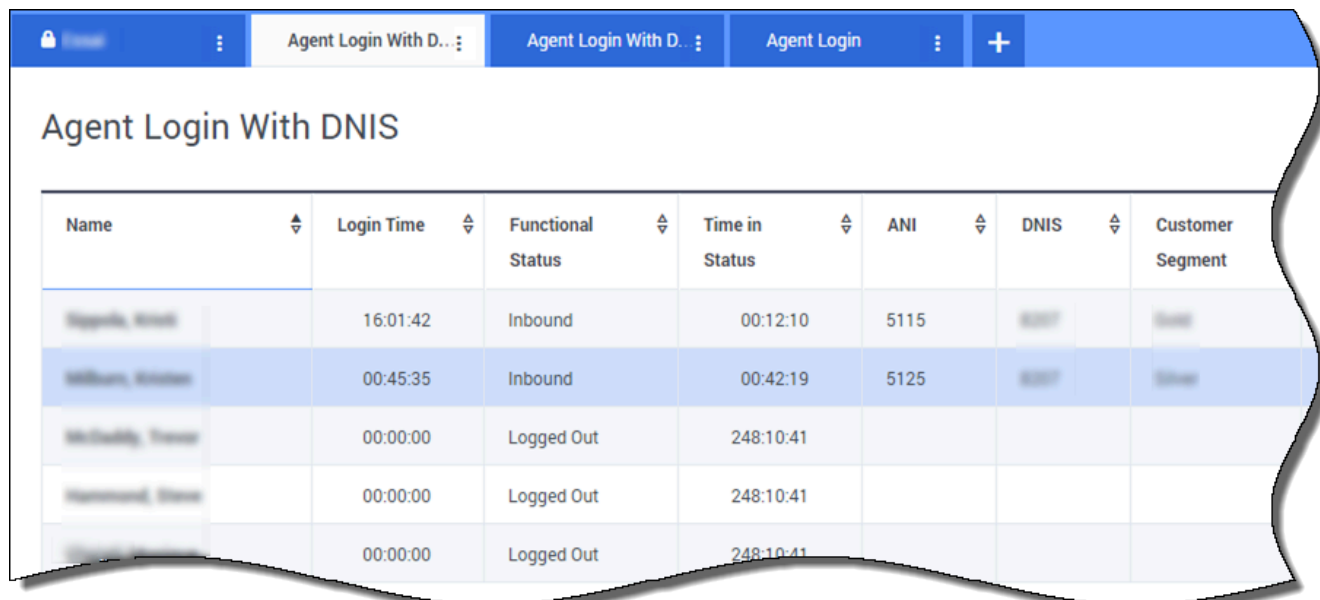
### [+] Show current agent state by media type

You can display the current agent state by media type.

**Formula - Get agent state by media type**

```
Result = G.GetAgentStatusPerMedia(Data.Current_Status.Value,
'email');
```

How can I display interaction properties?



The screenshot shows a report interface with a blue header bar containing navigation tabs. The main report title is 'Agent Login With DNIS'. Below the title is a table with columns: Name, Login Time, Functional Status, Time in Status, ANI, DNIS, and Customer Segment. The table contains five rows of data, with the second row highlighted in blue.

Name	Login Time	Functional Status	Time in Status	ANI	DNIS	Customer Segment
Agarwal, Anil	16:01:42	Inbound	00:12:10	5115	8007	Gold
Williams, Andrew	00:45:35	Inbound	00:42:19	5125	8007	Silver
McQuibbin, Trevor	00:00:00	Logged Out	248:10:41			
Hammond, Steve	00:00:00	Logged Out	248:10:41			
Sharma, Anurag	00:00:00	Logged Out	248:10:41			

Let's say you want to display interaction properties including flow segmentation, ANI, and DNIS. You can use formulas to find the information you need:

**[+] Show the customer segment of the interaction**

You can display the customer segment defined by the CustomerSegment key-value pair of the interaction by using the following formula.

**Formula: Get Customer Segment**

```
Result = G.GetSegment(Data.Current_Status.Value);
```

**[+] Show the ANI of the customer**

You can display the ANI of the customer by using the following formula.

**Formula: Get ANI**

```
[Result = G.GetANI(Data.Current_Status.Value);
```

**[+] Show the DNIS of the customer**

You can display the DNIS of the customer by using the following formula.

**Formula: Get DNIS**

```
Result = G.GetDNIS(Data.Current_Status.Value);
```

# Template Function Library

Once you know how to [use formulas](#), you can use this function library as reference for additional customization.

Below is a function library for Genesys Pulse standard templates as automatically generated from Genesys Pulse release 8.5.102.02.

GetAgentNonVoiceStatus(state, media) → {string}

Get agent's status name for the media other than Voice.

Parameters:

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).
media	string	Media name.

Returns:

*Status name*, if **state** and **media** are available, *empty string* if information about given media is not available in the given current state, *null* if **state** is null or not an agent state, or **media** is null, not specified or empty.

Type = string

GetAgentVoiceStatus(state) → {string}

Get agent's status name for the Voice media.

Parameters:

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

---

**Returns:**

*Status name*, if **state** is available, *null* if **state** is null or not an agent state.

Type = string

GetANI(state, switchID) → {string}

Get a first available ANI attribute in the given agent state.

**Parameters:**

Name	Type	Argument	Description
state	AgentCurrentState		Current state of the agent (typically, <b>Value</b> of the appropriate statistic).
switchID	string	<optional>	Optional switch name to limit the search.

**Returns:**

*ANI value*, if found, *empty string* if not found, *null* if **state** is null or not an agent state.

Type = string

GetBusinessResult(state)

Get "Business Result" user data value.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

**Returns:**

*Business Result value*, if available, *empty string*, if required user data is not available, *null* if **state** is null or not an agent state.

---



## GetCustomerSegment(state)

Get "CustomerSegment" user data value.

### Parameters:

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

### Returns:

*CustomerSegment value*, if available, *empty string*, if required user data is not available, *null* if **state** is null or not an agent state.

## GetDNIS(state, switchID) → {string}

Get a first available DNIS attribute in the given agent state.

### Parameters:

Name	Type	Argument	Description
state	AgentCurrentState		Current state of the agent (typically, <b>Value</b> of the appropriate statistic).
switchID	string	<optional>	Optional switch name to limit the search.

### Returns:

*DNIS value*, if found, *empty string* if not found, *null* if **state** is null or not an agent state.

Type = string

## GetEmployeeId(state) → {string}

Get agent's Employee ID designated in the given agent state.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic)

**Returns:**

*Agent's Employee ID*, if available, *empty string* if not available (typically, when agent is logged out), *null* if **state** is null or not an agent state.

Type = string

GetExtension(state) → {string}

Get agent's Extension designated in the given agent state.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic)

**Returns:**

*Agent's Extension*, if available, *empty string* if not available (typically, when agent is logged out), *null* if **state** is null or not an agent state.

Type = string

GetLoginId(state) → {string}

Get agent's Login ID designated in the given agent state.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic)

---

**Returns:**

*Agent's Login ID*, if available, *empty string* if not available (typically, when agent is logged out), *null* if **state** is null or not an agent state.

Type = string

GetPlace(state) → {string}

Get agent's place designated in the given agent state.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

**Returns:**

*Agent's Place name*, if available, *empty string* if not available (typically, when agent is logged out), *null* if **state** is null or not an agent state.

Type = string

GetPosition(state) → {string}

Get agent's ACD Position designated in the given agent state.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic)

**Returns:**

*Agent's ACD Position*, if available, *empty string* if not available (typically, when agent is logged out), *null* if **state** is null or not an agent state.

Type = string

## GetReasonCodes(state) → {string}

Get reason codes corresponding to the current status of the agent from all media types. Reason codes can be obtained only for the following agent statuses: LoggedIn, AfterCallWork, NotReadyForNextCall, WaitForNextCall.

### Parameters:

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

### Returns:

*Reason codes*, splitted by '; ', if available, *empty string* if reason code is not available, *null* if **state** is null or not an agent state.

Type = string

## GetServiceSubType(state)

Get "ServiceSubType" user data value.

### Parameters:

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

### Returns:

*ServiceSubType value*, if available, *empty string*, if required user data is not available, *null* if **state** is null or not an agent state.

## GetServiceType(state)

Get "ServiceType" user data value.

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**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).

**Returns:**

*ServiceType value*, if available, *empty string*, if required user data is not available, *null* if **state** is null or not an agent state.

GetStatusDuration(state) → {Number}

Get duration of the current status of the agent.

**Parameters:**

Name	Description
state	Current state of the agent, agent group, DN or campaign (typically, <b>Value</b> of the appropriate statistic).

**Returns:**

*Duration*, in seconds, if **state** is available, *null* if **state** is null.

Type = Number

GetSwitches(state, sep)

Get list of switches where agent is logged in.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).
sep	string	Separator to use. Default is ';'.

**Returns:**

*List of switches*, if available, *empty string*, if agent is completely logged out, *null* if **state** is null or not an agent state.

**GetUserDataValue(state, key)**

Get value of the first found user data with given key.

**Parameters:**

Name	Type	Description
state	AgentCurrentState	Current state of the agent (typically, <b>Value</b> of the appropriate statistic).
key	string	User data key

**Returns:**

*User data value*, if available, *empty string*, if required user data is not available, *null* if **state** is null or not an agent state or **key** is null.