



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

# Real-time Reporting with Pulse

Report Formulas

3/27/2025

---

## Contents

- 1 Add a Formula
- 2 Display Percentages
- 3 Display Agent Status KPIs
  - 3.1 How the Current\_Status Statistic is Defined
  - 3.2 Show Agent Time in Current State
  - 3.3 Show the Reason Code Selected by the Agent
  - 3.4 Show Current Agent State by Media Type
- 4 Display Agent Skills
- 5 Display Interaction Properties
  - 5.1 Show the Customer Segment of the Interaction
  - 5.2 Show the ANI of the Customer
  - 5.3 Show the DNIS of the Customer
- 6 What do I do next?



- Supervisor

You can use a formula to retrieve statistics or specific key performance indicators (KPIs).

**Related documentation:**

- 
- 

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.

**Tip**

If you already know how to use the formulas, you can use the function library to help you create your formulas.

## Add a Formula

**Statistics \*** Add

Hit Ratio		
Estimated Time		
Records Completed		
Dialed Abandoned		
Dialed Answering Ma...		
<b>Answers</b>	<input checked="" type="checkbox"/>	
Attempt Busies		
Attempts Cancelled		
Attempts made		
DoNotCall Results		
Dropped Results		
Fax Modem Results		
No Answer Result		

**Display Name \***

Answers

**Description**

The total number of dialing attempts initiated by a Campaign Manager with a call result of Answer (when a call is answered by a human voice). In some contact centers, the call result can also mean Right

**Alias \*** Campaign\_Answers

**Display Format \*** Integer

**Formula**

Hide Statistic  Show Agent State Icon

Save

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.

## Display Percentages

Let us 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.

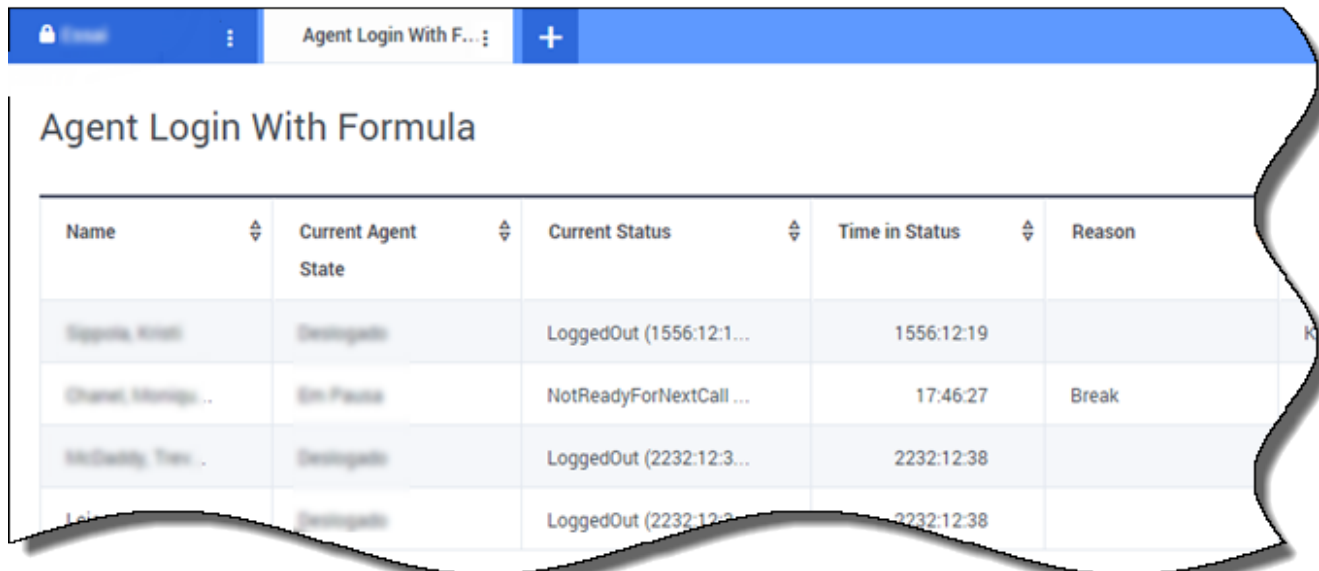
In the following formula, we assume the outbound calls are defined by a statistic alias `Outbound` and the inbound calls are `Inbound`.

---

## 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;
```

## Display Agent Status KPIs



The screenshot shows a dashboard with a blue header bar containing a lock icon, a menu icon, and the text 'Agent Login With F...'. Below the header is a white box titled 'Agent Login With Formula' containing a table with the following data:

Name	Current Agent State	Current Status	Time in Status	Reason
Support, K...	Delegated	LoggedOut (1556:12:1...	1556:12:19	
Channel Manag...	On Pause	NotReadyForNextCall ...	17:46:27	Break
McDermott, Tr...	Delegated	LoggedOut (2232:12:3...	2232:12:38	
Le...	Delegated	LoggedOut (2232:12:3...	2232:12:38	

Let us 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++) {
    s.indexOf("Offline") > -1 ||
    s.indexOf("Training") > -1 ) { Result = s; break; }
}
```

### Formula: Get Reason Code by Media Type (chat in the example below)

```
function GetNRCode(state) {
    if (state === null || state.type !== "AgentCurrentState")
        return null;

    var res = "";
    var n = state.DNs.length;

    if (n > 0) {
        for (var i = 0; i < n; i++) {
            for (var k = 0; k < state.DNs[i].length; k++) {
                if (state.DNs[i][k].indexOf("Voice") > -1) {
                    res = state.DNs[i][k];
                    break;
                }
            }
        }
    }
}
```

### Formula: Get Reason Code For Voice

```
function GetVR(state) {
    if (state === null || state.type !== "AgentCurrentState")
        return null;

    var res = "";
    var n = state.DNs.length;

    if (n > 0) {
        for (var i = 0; i < n; i++) {
            for (var k = 0; k < state.DNs[i].length; k++) {
                if (state.DNs[i][k].indexOf("Voice") > -1) {
                    res = state.DNs[i][k];
                    break;
                }
            }
        }
    }
}
```

## Tip

The formula should be customized according to your environment. Please contact Genesys Customer Care for details.

## Show Current Agent State by Media Type

You can display the current agent state by media type.

### Formula - Get agent state by media type

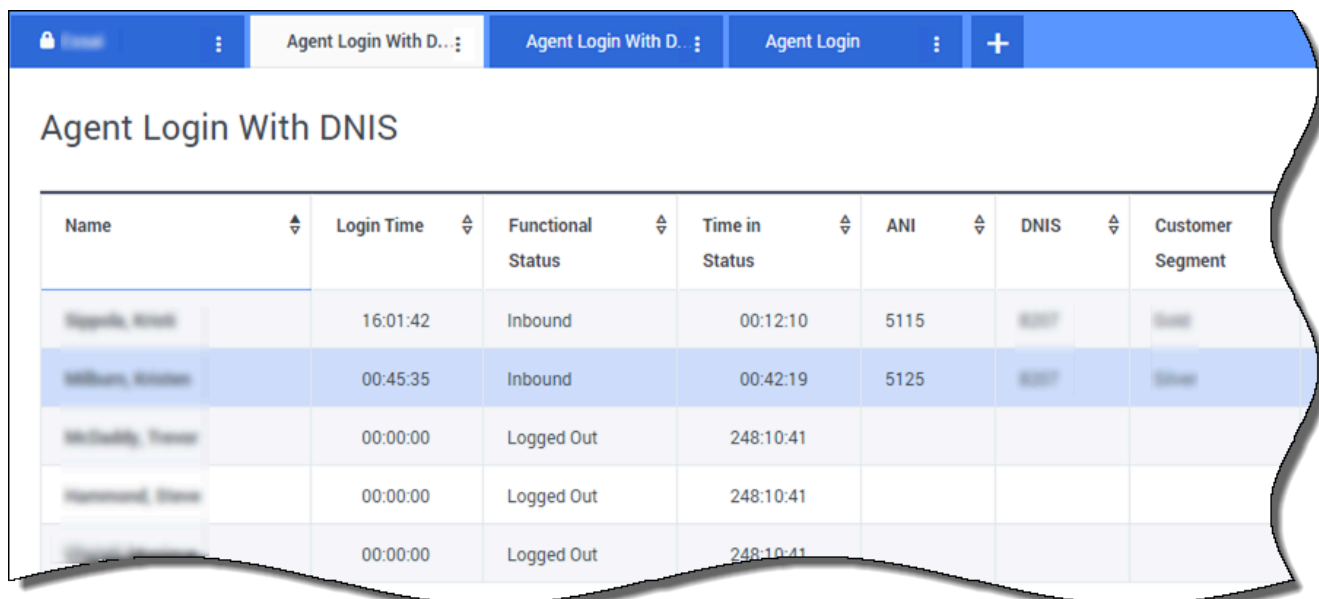
```
Result = G.GetAgentStatusPerMedia (Data.Current_Status.Value, 'email');
```

## Display Agent Skills

You can display agent skills using the following formula. The result includes the name and level of each skill the agent has.

```
Result = "";  
if (Object.Skills != null) {  
    for (var i = 0; i
```

## Display Interaction Properties



The screenshot shows a dashboard titled "Agent Login With DNIS". The dashboard has a blue header with navigation tabs: "Home", "Agent Login With D...", "Agent Login With D...", "Agent Login", and a "+" icon. Below the header is a table with the following columns: Name, Login Time, Functional Status, Time in Status, ANI, DNIS, and Customer Segment. The table contains five rows of data.

Name	Login Time	Functional Status	Time in Status	ANI	DNIS	Customer Segment
Agenda, Alex	16:01:42	Inbound	00:12:10	5115	5007	Blue
Williams, Andrew	00:45:35	Inbound	00:42:19	5125	5007	Blue
McLadd, Trevor	00:00:00	Logged Out	248:10:41			
Hammond, Steve	00:00:00	Logged Out	248:10:41			
...	00:00:00	Logged Out	248:10:41			

Let us 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);
```

## What do I do next?

You might want to learn more about:

- [Manage Report Templates](#)
- [Statistic Properties](#)
- [Template Function Library](#)