Stat Server User's Guide

Stat Server 8.5.1 User's Guide

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What Is Stat Server?

Stat Server is a Genesys application that tracks information about customer interaction networks (contact center, enterprise-wide, or multi-enterprise telephony and computer networks). Stat Server also converts the data accumulated for directory numbers (DNs), agents, agent groups, and non-telephony-specific object types, such as e-mail and chat sessions, into statistically useful information, and passes these calculations to other software applications that request data. For example, Stat Server sends data to Universal Routing Server (URS) to inform the URS about agent availability. You can also use Stat Server's numerical statistical values as routing criteria. Stat Server provides contact center managers with a wide range of information, allowing organizations to maximize the efficiency and flexibility of customer interaction networks.

[+] Monitoring Contact Centers

Stat Server tracks what is happening at any DN - whether it belongs to an agent station, an individual agent who moves between stations, an interactive voice response (IVR), or a point in a private branch exchange (PBX) used for queuing or routing.

For example, for each DN, Stat Server tracks DN activity, call activity on a DN, and other relevant derived states, such as how long a phone is not in use, how long a call is on hold, how long it takes to dial a call, how long a DN is busy with an inbound call, and so forth.

From the gathered information, Stat Server performs a variety of statistical calculations to provide its clients:

- Duration in current state
- Total number of times each state occurs
- Cumulative time for each state
- Percentage of time for each state
- Average time for each state
- Maximum and minimum times for each state

For a queue or routing point, Stat Server can track the following data:

- Number of currently waiting calls
- Cumulative waiting time of queued calls
- Average waiting time of queued calls
- Maximum and minimum waiting time of queued calls
- Information on the outcome of calls after they have been distributed from the queue

[+] Multimedia Support

To support the distribution strategies provided in the Genesys eServices, beginning with the 7.0 release, Stat Server architecture was improved to include two new statistical object types: StagingArea and Strategy. Another feature introduced during the 7.x release was the Genesys Resource Capacity Model, which reflects an agent's ability to handle multiple, simultaneous interactions of differing media types on both single-media and multimedia DNs. You can configure agent ability in Genesys Administrator Extension using the **Resource Capacity Editor** to create capacity rules. The *Resource Capacity Planning Guide* describes this model and how to use it.

> ### Important
> SIP Instant Messaging interactions and e-Services chat interactions use the same media type chat, they cannot co-exist for the same Place/Agent. Such deployment is not supported by Genesys Capacity Model.

[+] Stat Server Features

Dynamic Agent Tracking. Stat Server dynamically tracks customer service representatives as they login into DNs and media channels in a business environment. Each agent is identified by an ID, and regardless of the agent's location, Stat Server can track that agent's activity based on this ID.

Multi-Site Monitoring. Stat Server can monitor more than one T-Server and, therefore, more than one PBX switch. Even if you use different kinds of switches, Stat Server tracks what happens with all calls delivered to these switches, providing statistical information for different sites simultaneously.

Java Functionality. Starting with release 7.0, Stat Server architecture was extended to include support for pluggable statistical modules written in Java. This added flexibility enables you to dynamically extend Stat Server functionality with new statistical types (residing in Stat Server's Java Extensions) and to have Stat Server supply them to Genesys applications. The *Framework Stat Server Deployment Guide* describes how to enable Java functionality in your Stat Server applications.

Stuck Call Recognition. Stat Server distinguishes stuck calls from those calls that are abandoned for reasons not related to the synchronization of Genesys software. A *stuck* call within the Genesys realm always involves a missynchronization between two or more interdependent contact center components (such as T-Server and the switch, Stat Server and T-Server, or the Genesys Router and Stat Server).
Many improvements were made within the 7.x releases of T-Server for better detection and clearing of stuck connection IDs. As a result:

- For regular queues, T-Server now distributes an abandoned or released TEvent, coupled with an AttributeReliability attribute other than TReliabilityOk, to its clients upon detecting a stuck call. When determining object actions and statuses, Stat Server considers such events (EventAbandoned/ EventReleased with AttributeReliability != TReliabilityOk) for the termination of all call-related, durable actions.

- For virtual queues, starting with the URS 7.5 release, T-Server now distributes the EventReserved_2 TEvent, which is generated by Universal Routing Server on behalf of virtual queue objects and received by Stat Server as confirmation that a call still resides at the virtual queue. Stat Server detects and

removes stuck calls at the virtual queue when Stat Server does not receive the expected `EventReserved_2` event during the time frame indicated by the **call_kpl_time** Universal Routing configuration option. Stat Server interprets not receiving this event within the specified interval as the call is no longer at the virtual queue and should be deleted from Stat Server memory. To learn more about this functionality, refer to the description of the **call_kpl_time** configuration option in the *Universal Routing Reference Manual* and the **check-vqstuck-calls-frequency** configuration option in the *Stat Server Deployment Guide*.

Tracking Virtual Queue Interactions in Multi-Site Scenarios. Improvements in the 7.x releases of Universal Routing Server (URS) enable Stat Server to more accurately track interactions that are distributed by virtual queue objects across different sites and calculate call-related statistics for them. Stat Server reads the `TransferConnid` attribute of attached data, which URS 7.6 attaches to the TEvent of the original call, and Stat Server uses this information to match the transferred or conferenced call to the original call.

`CallAnswered`, `CallMissed`, `CallReleased`, and other retrospective, interaction-related actions that reflect regular DNs now more accurately account for count and duration metrics in multi-site scenarios. In addition, Stat Server now considers and relies on the value of the `ThirdPartyDN` attribute in `EventDiverted` TEvents from URS to determine the location to which calls were diverted from a virtual queue.

Network Attended Transfers. Stat Server 7.1 and later releases support network-attended transfers and conferences in much the same way as it supports two-step transfers and conferences handled by premise T-Server applications. Stat Server now monitors call operations (alternate, reconnect, network attended transfer, network attended conference) and generates corresponding call-related actions and statuses for Regular DN objects. Stat Server does not support monitoring of Mediation DN objects (such as ACD queues) in network-attended call scenarios.