# Platform SDK Developer's Guide

Custom Statistics: Getting Agent State for All Channels

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# Custom Statistics: Getting Agent State for All Channels

When working with Stat Server, you can configure custom statistics that allow your applications to easily monitor information that might not otherwise be available.

In this article we will build a custom statistic that can be used to return the agent state for all channels, and then look at what the returned EventInfo message might look like.

## Configuring a Custom Statistic

Custom statistics can be configured by updating the Stat Server application object in your Genesys environment. This means adding a new section to the application object, and then specifying values for a set of options inside that section that determine how statistics are formed and reported.

> ### Important
>
> For details on how to build your own custom statistics, refer to the Stat Server documentation.

To monitor the agent state for all channels, add the following section to your Stat Server application object:

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

## Resulting EventInfo Object

Once your custom statistic is defined in the Stat Server application object, your application can receive EventInfo messages that give your application details about the agent state for all channels. Code from the *Working with Statistics* section of the Stat Server article shows how to subscribe to a statistic; the only change required is using the name defined as part of your custom statistic. (In the example above, the custom statistic name is Custom_CurrentAgentDNState.)

A sample EventInfo message is provided below for reference:

```
'EventInfo' (2) attributes:
VOID_VALUE [object] = ObjectValue: AgentStatus {
  AgentId = MCR_Agent0
```

```
LoginId = 6000
Status = 9
Time = 1392641892
Place = PlaceStatus {
  PlaceId = Place_6000_MCR
  PlaceStatus = 9
  Time = 1392641892
  DnStatuses = DnStatusesCollection (size=7) [
    [0] DnStatus {
      DN Id = 6000
      SwitchId = Simulator
      GSW DN TYPES = 1
      DN Status = 9
      Time = 1392641892
      Actions = DnActionCollection (size=3) [
        [0] DnAction {
          Action = Monitored
          Time = 1392641870
          ActionDataType = NoData
          ConnectionId = null
          DNIS = null
          ANI = null
          UserData = null
        }
        [1] DnAction {
          Action = LoggedIn
          Time = 1392641870
          ActionDataType = CallData
          ConnectionId = 0000000000000000
          DNIS = null
          ANI = null
          UserData = KVList:
        }
        [2] DnAction {
          Action = AfterCallWork
          Time = 1392641892
          ActionDataType = CallData
          ConnectionId = 0000000000000000
          DNIS = null
          ANI = null
          UserData = KVList:
        }
      ]
    }
    [1] DnStatus {
      DN Id = workitem
      SwitchId = null
      GSW DN TYPES = 0
      DN Status = 8
      Time = 1392641870
      Actions = DnActionCollection (size=2) [
        [0] DnAction {
          Action = LoggedIn
          Time = 1392641870
          ActionDataType = CallData
          ConnectionId = 0000000000000000
          DNIS = null
          ANI = null
          UserData = KVList:
          'MediaType' [str] = "workitem"
        }
        [1] DnAction {
          Action = NotReadyForNextCall
```

```
                Time = 1392641870
                ActionDataType = CallData
                ConnectionId = 0000000000000000
                DNIS = null
                ANI = null
                UserData = KVList:
                'MediaType' [str] = "workitem"
            }
        ]
    }
    [2] DnStatus {
        DN Id = email
        SwitchId = null
        GSW DN TYPES = 0
        DN Status = 8
        Time = 1392641870
        Actions = DnActionCollection (size=2) [
            [0] DnAction {
                Action = LoggedIn
                Time = 1392641870
                ActionDataType = CallData
                ConnectionId = 0000000000000000
                DNIS = null
                ANI = null
                UserData = KVList:
                'MediaType' [str] = "email"
            }
            [1] DnAction {
                Action = NotReadyForNextCall
                Time = 1392641870
                ActionDataType = CallData
                ConnectionId = 0000000000000000
                DNIS = null
                ANI = null
                UserData = KVList:
                'MediaType' [str] = "email"
            }
        ]
    }
    [3] DnStatus {
        DN Id = fax
        SwitchId = null
        GSW DN TYPES = 0
        DN Status = 8
        Time = 1392641870
        Actions = DnActionCollection (size=2) [
            [0] DnAction {
                Action = LoggedIn
                Time = 1392641870
                ActionDataType = CallData
                ConnectionId = 0000000000000000
                DNIS = null
                ANI = null
                UserData = KVList:
                'MediaType' [str] = "fax"
            }
            [1] DnAction {
                Action = NotReadyForNextCall
                Time = 1392641870
                ActionDataType = CallData
                ConnectionId = 0000000000000000
                DNIS = null
                ANI = null
```

```
            UserData = KVList:
            'MediaType' [str] = "fax"
        }
    ]
  }
  [4] DnStatus {
    DN Id = chat
    SwitchId = null
    GSW DN TYPES = 0
    DN Status = 8
    Time = 1392641870
    Actions = DnActionCollection (size=2) [
        [0] DnAction {
            Action = LoggedIn
            Time = 1392641870
            ActionDataType = CallData
            ConnectionId = 0000000000000000
            DNIS = null
            ANI = null
            UserData = KVList:
            'MediaType' [str] = "chat"
        }
        [1] DnAction {
            Action = NotReadyForNextCall
            Time = 1392641870
            ActionDataType = CallData
            ConnectionId = 0000000000000000
            DNIS = null
            ANI = null
            UserData = KVList:
            'MediaType' [str] = "chat"
        }
    ]
  }
  [5] DnStatus {
    DN Id = sms
    SwitchId = null
    GSW DN TYPES = 0
    DN Status = 8
    Time = 1392641870
    Actions = DnActionCollection (size=2) [
        [0] DnAction {
            Action = LoggedIn
            Time = 1392641870
            ActionDataType = CallData
            ConnectionId = 0000000000000000
            DNIS = null
            ANI = null
            UserData = KVList:
            'MediaType' [str] = "sms"
        }
        [1] DnAction {
            Action = NotReadyForNextCall
            Time = 1392641870
            ActionDataType = CallData
            ConnectionId = 0000000000000000
            DNIS = null
            ANI = null
            UserData = KVList:
            'MediaType' [str] = "sms"
        }
    ]
  }
```

```
    [6] DnStatus {
      DN Id = webform
      SwitchId = null
      GSW DN TYPES = 0
      DN Status = 8
      Time = 1392641870
      Actions = DnActionCollection (size=2) [
        [0] DnAction {
          Action = LoggedIn
          Time = 1392641870
          ActionDataType = CallData
          ConnectionId = 0000000000000000
          DNIS = null
          ANI = null
          UserData = KVList:
          'MediaType' [str] = "webform"
        }
        [1] DnAction {
          Action = NotReadyForNextCall
          Time = 1392641870
          ActionDataType = CallData
          ConnectionId = 0000000000000000
          DNIS = null
          ANI = null
          UserData = KVList:
          'MediaType' [str] = "webform"
        }
      ]
    }
  ]
  }
}

TM_LENGTH [int] = 0
LONG_VALUE [int] = 0
USER_REQ_ID [int] = -1
TM_SERVER [int] = 1392641892
REQ_ID [int] = 520
```