

## **Contact Sharing Reports**

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## **Contact Sharing Reporting**

You can use Contact Sharing to distribute calls to agents across multiple Unified Contact Center Enterprise (Unified CCE) systems. With Contact Sharing, you can efficiently route calls to a much larger number of agents than a standard Unified CCE system can support.

You configure Contact Sharing to make routing decisions based on the current state of the target Unified CCE systems, such as the number of calls in queue, agent availability, average handle time, and custom calculations. Using rules you specify and Live Data information on the current state of the target systems, Contact Sharing decides which Unified CCE system to route the calls to.

You can use the Contact Sharing reports to understand the current configuration and behavior of the Contact Sharing system. You can view data on the active configuration of the Contact Sharing routing, the number of calls routed to each target system for each group, and the calls that have errors during the routing process. In addition, you can use the Contact Sharing Results Calculations report to see the change in the actual result calculated by the current Contact Sharing expression formula as routing is processed.

## **Contact Sharing All Fields**

Use this report to view selected fields that provide Route Call Detail information for Contact Sharing calls.

Views: This report has one grid view, Contact Sharing All Fields.

**Query:** This report data is built from an Anonymous Block query.

**Grouping:** This report is grouped by Contact Share Group and Rule.

### Value List: Contact Share Group

#### **Database Schema Tables:**

- Contact\_Share\_Group
- Contact\_Share\_Group\_Member
- Contact\_Share\_Queue
- Contact\_Share\_Rule
- Route\_Call\_Detail
- Application\_Gateway
- Call\_Type
- Routing\_Client
- Script
- Master\_Script

### **Current Fields in the Contact Sharing All Fields Report View**

| Columns (Fields) | Description   |
|------------------|---|
| Group            | The unique name of this Contact Share Group.  |
|                  | Derived from: Contact_Share_Group.EnterpriseName  |
| Rule             | The name assigned to the rule when it was created.  |
|                  | Derived from: Contact_Share_Rule.EnterpriseName   |
| Rule Expression  | The rule expression that the Contact Share server uses to select the skill group or precision queue from a group for a routing request. |
|                  | Derived from: Contact_Share_Rule.RuleExpression   |
| Queue            | ·   |
| Name             | The name of the queue.  |
|                  | Derived from: Contact_Share_Queue.QueueName   |
| Туре             | Identifies the target queue as PQ (Precision Queue,) or SG (Skill Group.)   |
|                  | Derived from: Contact_Share_Queue.QueueType   |
| Target           |   |
| Name             | The unique enterprise name for the target application gateway.  |
|                  | Derived from: Application_Gateway.EnterpriseName  |

| Columns (Fields)        | Description   |
|-------------------------|---|
| Label                   | The label associated with the ultimate target at the switch.  |
|                         | Derived from: Route_Call_Detail.TargetLabel   |
| Accept Queue If         | The logical expression used to determine whether to include the individual skill groups and precision queues in the group for the routing decision. The contact share queue will be accepted IF the expression evaluates to true.   |
|                         | Derived from: Contact_Share_Group.AcceptQueueIf   |
| DateTime                | The date and time when the call was routed.   |
|                         | Derived from: Route_Call_Detail.DateTime  |
| ANI                     | Automatic Number Identification, identifies the calling party.  |
|                         | Derived from: Route_Call_Detail.ANI   |
| Dialed Number           | The dialed number for the call. If the dialed number for the call is configured, this will be the same as the DialedNumberString of the dialed number specified by DialedNumberID. If the dialed number for the call is not configured, this is the dialed number string and DialedNumberID will be NULL. |
|                         | Derived from: Route_Call_Detail.DialedNumberString  |
| Call Type               | The unique enterprise name for this call. If a script changes the call type, this is the final call type for the call.  |
|                         | Derived from: Call_Type.EnterpriseName  |
| Routing Client          | The unique enterprise name for this routing client.   |
|                         | Derived from: Routing_Client.EnterpriseName   |
| Master Script           | The unique enterprise name for the master script.   |
|                         | Master_Script.EnterpriseName  |
| CED                     | Caller-Entered Digits.  |
|                         | Route_Call_Detail.CED   |
| Variables               |   |
| Variable1 to Variable10 | 10 fields are provided for user-defined variables.  |
|                         | Derived from Route_Call_Detail.Variable1 to Route_Call_Detail.Variable10  |

# **Contact Sharing Calls Routed**

Use this report to view the number of calls routed to each Gateway from the Groups selected for the report between the start time and end time specified in the report Filter.

Views: This report has a default chart view (Calls routed) and a grid view.

**Query:** This report data is built from an Anonymous Block query.

**Grouping:** This report is grouped by Contact Share Group.

Value List: Contact Share Group

#### **Database Schema Tables:**

- · Contact Share Group
- · Contact Share Group Member
- Contact Share Queue
- Contact\_Share\_Rule
- Route\_Call\_Detail
- · Application Gateway

#### **Current Fields in the Grid View**

**Current** fields are those fields that appear by default in a report generated from the stock template.

| Fields  | Description  |
|---------|--|
| Gateway | The unique enterprise name for the target application gateway.   |
|         | Derived from: Application_Gateway.EnterpriseName   |
| Calls   | The number of calls routed to each Gateway between the start time and end time specified in the report Filter. |
|         | A count of the call completion rows in the Route_Call_Detail routed to each Gateway.                           |
| Errors  | The number of calls that could not be routed.  |
|         | The sum of routing and Contact Sharing errors during the specified time.                                       |

# **Contact Sharing Calls Routed Realtime**

Use this report to view the number of calls routed to each Gateway in the last 60 minutes from the Groups selected for the report.

This report re-queries the database every 15 seconds and updates summary values for the last 60 minutes.

Views: This report has a default chart view (Calls Routed) and a grid view.

**Query:** This report data is built from an Anonymous Block query.

**Grouping:** This report is grouped by Gateway.

Value List: Contact Share Group

### **Database Schema Tables:**

- Contact\_Share\_Group
- · Contact Share Group Member

- Contact\_Share\_Queue
- Contact\_Share\_Rule
- Route\_Call\_Detail
- Application\_Gateway

#### **Current Fields in the Grid View**

Current fields are those fields that appear by default in a report generated from the stock template.

| Fields | Description  |
|--------|--|
| Target | The unique enterprise name for the target application gateway.                                     |
|        | If any calls cannot be routed, they are displayed in the report as a separate Errors target.       |
|        | Derived from: Application_Gateway.EnterpriseName   |
| Calls  | The number of calls routed to each Gateway during the last 60 minutes, updated every 15 seconds.   |
|        | A count of the call completion rows in the Route_Call_Detail routed to each Gateway.               |
| Errors | The number of calls that could not be routed during the last 60 minutes, updated every 15 seconds. |
|        | The sum of routing and Contact Sharing errors during the specified time.                           |

# **Contact Sharing Calls Routed Over Time**

Use this report to view the number of calls routed to each target Gateway from the Groups selected for the report during the 12 hours following the StartDate specified in the report filter.

The number of calls routed to each Gateway are graphed against time in minute intervals over the 12-hour period. The number of calls that could not be routed during the 12 hours are displayed as a separate Errors target.

Views: This report has the following chart views and a gird view (Grid View Routed Over Time):

- Line View Routed Over Time (the default)
- Column View Routed Over Time

Select the view you want to see from the report drop-down list located to the far right in the menu bar.

**Query:** This report data is built from an Anonymous Block query.

**Grouping:** This report is grouped by Gateway.

Value List: Contact Share Group

#### **Database Schema Tables:**

- Contact\_Share\_Group
- Contact\_Share\_Group\_Member
- Contact\_Share\_Queue

- Contact\_Share\_Rule
- Route\_Call\_Detail
- Application\_Gateway

#### **Current Fields in the Routed Overtime Grid View**

Current fields are those fields that appear by default in a report generated from the stock template.

| Fields   | Description  |
|----------|--|
| Target   | The unique enterprise name for the target application gateway.                               |
|          | If any calls cannot be routed, they are displayed in the report as a separate Errors target. |
|          | Derived from: Application_Gateway.EnterpriseName   |
| DateTime | The minute interval for which the calls are being reported.                                  |
| Calls    | The number of calls routed to each Gateway during that minute interval.                      |
|          | A count of the call completion rows in the Route_Call_Detail routed to each Gateway.         |

# **Contact Sharing Configuration**

Use this report to view the Groups, Rules, Queues, and Targets associated with the Contact Share Groups selected for the report.

Views: This report has a grid view, Contact Sharing Configuration.

Query: This report data is built from a Database Query.

**Grouping:** This report is grouped by Contact Share Group.

Value List: Contact Share Group

### **Database Schema Tables:**

- Contact\_Share\_Group
- Contact\_Share\_Group\_Member
- Contact\_Share\_Queue
- · Contact\_Share\_Rule
- Application\_Gateway

### **Current Fields in the Contact Sharing Configuration Report View**

| Columns (Fields) | Description   |
|------------------|---|
| Group            | The GroupIDs of the groups selected for the report. Click '+' next to a GroupID to see detailed infromation for that group.   |
| Rule             | The name assigned to the rule when it was created.  |
|                  | Derived from: Contact_Share_Rule.EnterpriseName   |
| Group            |   |
| Description      | The description of the group entered when it was configured.  |
|                  | Derived from: Contact_Share_Group.Description   |
| Rule             |   |
| Description      | The description of the rule entered when it was configured.   |
|                  | Derived from: Contact_Share_Rule.Description  |
| Expression       | The rule expression that the Contact Share server uses to select the skill group or precision queue from a group for a routing request.                                   |
|                  | Derived from: Contact_Share_Rule.RuleExpression   |
| Queue            |   |
| Queue            | The name of the Queue that is configured on the target Unified CCE systems. It is the same as the EnterpriseName of the precision queue or skill group.                   |
|                  | Derived from: Contact_Share_Queue.QueueName   |
| Туре             | Identifies the target queue as P -Precision Queue, or S - Skill Group.  |
|                  | Derived from: Contact_Share_Queue.QueueType   |
| Description      | The description of this queue.  |
|                  | Derived from: Contact_Share_Queue.Description   |
| Target           |   |
| Target           | The unique enterprise name for the target application gateway.  |
|                  | Derived from: Application_Gateway.EnterpriseName  |
| Description      | The description of this target  |
|                  | Derived from: Application_Gateway.Description   |
| Preferred Side   | Indicates which side of the target gateway the software should use when both are available: A or B. This applies only when Application GatewayType is 0 (custom gateway). |
|                  | Derived from: Application_Gateway.PreferredSide   |

| Columns (Fields) | Description  |
|------------------|--|
| Accept Queue If  | The logical expression used to determine whether to include the individual skill groups and precision queues in the group for the routing decision. The contact share queue will be accepted IF the expression evaluates to true.  Derived from: Contact_Share_Group.AcceptQueueIf |

# **Contact Sharing Errors**

Use this report to view information on calls which had errors during the routing process. If there are no errors, the report is empty.



Note

Calls that end with RouterErrorCode 448, Dialog aborted and was deleted, are not included in the report. This is not a routing error. This error means the customer leg disconnected for the call at the routing client, usually because the customer ended the call.

Views: This report has one grid view, Contact Sharing Errors.

**Query:** This report data is built from an Anonymous Block query.

**Grouping:** This report is grouped by Contact Share Group and Target.

Value List: Contact Share Group

### **Database Schema Tables:**

- Contact\_Share\_Group
- · Contact Share Group Member
- Contact\_Share\_Queue
- Contact\_Share\_Rule
- Route\_Call\_Detail
- Application Gateway

### **Current Fields in the Contact Sharing Errors Report View**

| Columns (Fields) | Description  |
|------------------|--|
| Group            | The unique name of this Contact Share Group.                   |
|                  | Derived from: Contact_Share_Group.EnterpriseName               |
| Target           | The unique enterprise name for the target application gateway. |
|                  | Derived from: Application_Gateway.EnterpriseName               |

| Columns (Fields)           | Description   |
|----------------------------|---|
| Rule                       | The name assigned to the rule when it was created.  |
|                            | Derived from: Contact_Share_Rule.EnterpriseName   |
| Queue                      | The name of the Queue that is configured on the target Unified CCE systems. It is the same as the EnterpriseName of the precision queue or skill group.   |
|                            | Derived from: Contact_Share_Queue.QueueName   |
| Dialed Number String       | The dialed number for the call. If the dialed number for the call is configured, this will be the same as the DialedNumberString of the dialed number specified by DialedNumberID. If the dialed number for the call is not configured, this is the dialed number string and DialedNumberID will be NULL. |
|                            | Derived from: Route_Call_Detail.DialedNumberString  |
| Router Error Code          | Error code for this call from the CallRouter process.   |
|                            | Note Calls with RouterErrorCode 448 are not included in the report.   |
|                            | Derived from: Route_Call_Detail.RouterErrorCode   |
| Contact Sharing Error Code | Contact Share Error code returned by the contact share node.  |
|                            | • 0 - No error  |
|                            | • 2 - CS_NOT_CONNECTED  |
|                            | No connection to the Contact Share process.   |
|                            | • 3 - CS_TIMED_OUT  |
|                            | Request to the Contact Share process failed.  |
|                            | • 4 - CS_CONFIG_ERROR   |
|                            | Contact Share process encountered a configuration related error.  |
|                            | • 5 - CS_EXECUTION_ERROR  |
|                            | Contact Share process encountered an expression execution related error.  |
|                            | • 8 - CS_APPGTW_ERROR   |
|                            | Unable to lookup application gateway with the code that the Contact Share process returned.   |
|                            | • 9 - CS_UNKNOWN_ERROR  |
|                            | Contact Sharing encountered an unknown error.   |
|                            | Derived from: Route_Call_Detail.ContactShareErrorCode   |
| Interval                   | The starting date and time for the current count.   |
| Calls                      | The number of calls routed to this queue between the start time and end time specified in the report Filter that have errors.   |
|                            | A count of call completion records in Route_Call_Detail that have an error.   |

### **Contact Sharing Expression Results**

Use this report to view a graph of CalculationResults against DateTime for each Contact Sharing Group selected for the report.

This report graphs the result calculated by the current Contact Sharing expression formula for all calls routed to a given Contact Sharing group over the specified time period. For example, the default Contact Sharing algorithm, combines a Minimum Expected Delay (MED) calculation with an Agent Occupancy calculation to determine which target system receives the call for routing. Positive results represent an expected delay, and negative results indicate the percentage of agent idle time, that is, the percentage of time the agents in the group were available but not working.

For more information on the Contact Sharing expression formula, see "Contact Sharing" in the *Cisco Unified Contact Center Enterprise Features Guide* at http://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-feature-guides-list.html.

Views: This report has a default chart view (Contact Sharing Expression Results) and a grid view.

Query: This report data is built from a Database Query.

**Grouping:** This report is grouped by Contact Sharing Group.

Value List: Contact Sharing Group

### **Database Schema Tables:**

- · Contact Share Group
- Route\_Call\_Detail

### **Current Fields in the Grid View**

**Current** fields are those fields that appear by default in a report generated from the stock template.

The following table lists the fields used to create the Contact Sharing Results Calculations report generated from the stock template.

| Field    | Description  |
|----------|--|
| Group    | The unique name of this Contact Share Group.   |
|          | Derived from: Contact_Share_Group.EnterpriseName   |
| DateTime | The date and time when the call was routed, rounded to the nearest minute.   |
|          | Derived from: Route_Call_Detail.DateTime   |
| Result   | The result of the Contact Share Calculation as defined by the Rule Expression averaged over that minute.                           |
|          | The Route_Call_Detail record, ContactShareResult, shows the calculation result for the optimal queue in the Contact Sharing group. |
|          | Derived from: Route_Call_Detail.ContactShareResult   |

# **Contact Sharing Interval**

Use this report to see a count of the calls routed for each Contact Share Group selected for the report during the interval.

Views: This report has one grid view, Contact Sharing Report Interval.

Query: This report data is built from an Anonymous Block query.

**Grouping:** This report is grouped by Dialed Number String, Call Type, Target.

Value List: Contact Share Group

#### **Database Schema Tables:**

- · Contact Share Group
- Contact\_Share\_Group\_Member
- Contact\_Share\_Queue
- Contact\_Share\_Rule
- Application\_Gateway

### **Current Fields in the Contact Sharing Interval Report View**

| Columns (Fields)     | Description   |
|----------------------|---|
| Dialed Number String | The dialed number for the call. If the dialed number for the call is configured, this is the same as the DialedNumberString of the dialed number specified by DialedNumberID. If the dialed number for the call is not configured, this is the dialed number string and DialedNumberID is NULL.  Derived from: Route Call Detail.DialedNumberString |
| Call Type            | The unique enterprise name for this call. If a script changes the call type, this is the final call type for the call.  |
|                      | Derived from: Call_Type.EnterpriseName  |
| Target               | The unique enterprise name for the target application gateway.  |
|                      | Derived from: Application_Gateway.EnterpriseName  |
| Group                | The unique name of this Contact Share Group.  |
|                      | Derived from: Contact_Share_Group.EnterpriseName  |
| Rule                 | The name assigned to the rule when it was created.  |
|                      | Derived from: Contact_Share_Rule.EnterpriseName   |
| Queue                | The name of the Queue that is configured on the target Unified CCE systems. It is the same as the EnterpriseName of the precision queue or skill group.   |
|                      | Derived from: Contact_Share_Queue.QueueName   |

| Columns (Fields)           | Description  |
|----------------------------|--|
| Router Error Code          | Error code from the CallRouter process.  |
|                            | Derived from: Route_Call_Detail.RouterErrorCode  |
| Contact Sharing Error Code | Contact Share Error code returned by the contact share node.   |
|                            | • 0 - No error   |
|                            | • 2 - CS_NOT_CONNECTED   |
|                            | No connection to the Contact Share process.  |
|                            | • 3 - CS_TIMED_OUT   |
|                            | Request to the Contact Share process failed.   |
|                            | • 4 - CS_CONFIG_ERROR  |
|                            | Contact Share process encountered a configuration-related error.   |
|                            | • 5 - CS_EXECUTION_ERROR   |
|                            | Contact Share process encountered an expression execution-related error.   |
|                            | • 8 - CS_APPGTW_ERROR  |
|                            | Unable to lookup application gateway with the code that the Contact Share process returned.  |
|                            | • 9 - CS_UNKNOWN_ERROR   |
|                            | Contact Sharing encountered an unknown error.  |
|                            | Derived from: Route_Call_Detail.ContactShareErrorCode  |
| Interval                   | The starting date and time for the current count.  |
| Count                      | The number of calls routed to this queue between the start time and end time specified in the report Filter. This is a count of the call completion rows from the Routing_Call_Detail table. |