Mitel MiContact Center Enterprise

WEB MANAGER
USER GUIDE

Release 9.5 SP2

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TRADEMARKS

Web Manager User Guide
Release 9.5 SP2 – October 2021

INTRODUCTION

This document describes how to use the Web Manager applications in Mitel MiContact Center Enterprise.

The **Web Manager** application provides real-time information on Agents and Service Groups to supervisors and managers who can then adapt contact center parameters such as required skills.

This application can also be used to configure shareable Wall Display screens showing a number of supervision panels.

For more information on how to configure the Web Manager application and access it from the internet, refer to the Web Applications Configuration Guide.

STARTING THE APP

After installation, the Web Manager web application is accessible from the LAN at the following location:

http://<MiCC Enterprise Server>/WebApps/ContactCenter

where <MiCC Enterprise Server> is the name or IP address of the server where MiCC Enterprise web services are hosted.

Note: If a different port other than the default HTTP port 80 is defined for the MiCC Enterprise Web Services, the port must be specified when launching Web Manager. For example, if port 5000 is used, Web Manager should be launched with the following:

http://<MiCC Enterprise Server>:5000/WebApps/ContactCenter

Depending on the company web site configuration, the app may also be accessible from the internet and through a secure (HTTPS) connection.

For multi-tenanted systems, the Web Manager web app is also accessible from the LAN at the following location:

http://<MiCCEnterpriseServer>/WebApps/ContactCenter/Authentication/Login/tenant/<TenantName>

where <TenantName> is the name of the MiCC Enterprise tenant to log on to.

TENANT SELECTION

To login to a particular tenant, the tenant name must be specified at the end of the URL, in the format

http://<MiCC Enterprise Server>/WebApps/ContactCenter/Authentication/Login/tenant/<TenantName>

(On a non-tenanted installation, this is not necessary.)

If the supervisor or manager has already logged on from the same web browser, the previously chosen tenant is pre-selected. If the administrator can manage more than one tenant, the administrator can select a specific tenant from the top-right drop-down list.

LOGON WITH MICC ENTERPRISE

To authenticate with MiCC Enterprise, the supervisor or manager must authenticate by providing valid **Logon ID** and **Password** (as set in Configuration Manager or Web Manager).

LOGON WITH ANOTHER SERVICE

If the selected tenant has been configured with an external Identity Provider, the user can click the corresponding button to be authenticated through this service.

The first time a user authenticates in this way, a one-time registration screen appears, in which the user's **Logon ID** must be provided. On subsequent logons, the user is immediately identified.

PRIVACY LINK

If configured, the log on window displays a privacy link. Clicking on the link opens a new tab in the browser where the organization's privacy policy is displayed.

OVERLAY MENU

After authentication, you can open and close the application menu using the button in the top right corner.

The menu provides access to all configurable objects such as Service Groups, Users, Skills, Agent Groups, Not Ready Reasons, Call Qualification Codes, etc.

It also links to the list of Wall Display screens and to the Scheduler application.

The authenticated user can also log out of the application from this menu.

CONTACT CENTER CONFIGURATION

The Web Manager application uses three types of screen elements for configuration of contact center elements and parameters:

- lists of elements
- edit forms to create or modifying a particular element
- assignment screens defining element associations.

LISTS

A list shows a number of contact center elements in a multi-column view displaying important properties of each element. Each row starts with a check box allowing the user to select the corresponding element, and multiple rows can be selected at the same time.

A toolbar above the list contains a button for each action that can be performed on the list or on the selected elements.

While the Create action is always enabled, some buttons in the toolbar are only enabled if exactly one element is selected in the list (e.g., the Edit button) and other buttons are enabled if one or more elements are currently selected (e.g., the Delete button).

For the User element, the Show Skills button shows all skills and skills levels for the selected users.

EDIT FORMS

When a contact center element is created or modified (Create or Edit buttons), the corresponding edit form opens. This screen allows you to define the basic properties of the configured element.

If an invalid value is entered in a given input field (entering invalid characters or an out-of-range number for instance), an appropriate message is displayed to help you correct the issue. You cannot save the changes in the form until all entries are valid.

ASSIGNMENT SCREENS

OVERVIEW

Some elements can be assigned to others. These assignments are performed through similar assignment screens organized as follows.

The top list contains the elements to be assigned. It is always possible to select multiple rows in this list.

The bottom list contains the target elements to which the previous ones are assigned. Multiple target elements can generally be selected, except when assigning Users to an Agent Group.

When all selections have been done in the top and bottom lists, the screen can be applied / saved: all assignments are then performed in a single step.

In most assignment screens, all elements that are selected in the top list are assigned to the target elements in the bottom list, and all elements that are not selected in the top list are unassigned from those target elements. However, the skill assignment behaves differently, as detailed below.

PRE-SELECTION

If some assignable elements or targets are selected in the original list before the Assign button is pressed, the assignment screen pre-selects them in either the top or the bottom list.

For example, selecting 5 Users from the Users list and clicking the Assign to Agent Group button shows the Assignment of Agents to an Agent Group screen with those 5 users pre-selected in the top list.

CURRENT ASSIGNMENT

If a single target element is selected in the original list before the Assign button is pressed, then the assignment screen not only pre-selects it in the bottom list but also displays the currently assigned elements in the top list.

For example, selecting a single Agent Group from the Agent Groups list and pressing the Assign Agents button shows the Assignment of Agents to an Agent Group screen with this Agent Group pre-selected in the bottom list and all Users currently assigned to this Agent Group also pre-selected in the top list.

The currently assigned skill levels of a User, Service Group or Skill Template can also be viewed in this way.

SKILL LEVEL ASSIGNMENT

Assigning skills to Users, Service Groups or Skill Templates is a special kind of assignment because a specific level is set for each selected skill.

In skill assignment screens, the top list is used not only to select some skills but also to specify their numeric level. There are two main differences compared to other assignment screens.

- Only selected skills (and levels) are applied to the target elements.
  Unselected rows in the top list are ignored when applying the assignment screen: the level of the corresponding skills is not changed on the target elements.

- To remove a skill from target elements, the corresponding row must be selected in the top list and the skill level must be set to 0.

This has been designed to easily change a single skill level while leaving the other ones untouched. This mechanism allows the manager to use skills to represent teams of agents for instance, in addition to more traditional skills that reflect the individual competence of each agent, such as language knowledge.

Example

Suppose 3 skills are defined to represent the specific level of each agent in French, English and Swedish skills. The Front Office team is represented by another skill. A Service Group is defined to select agents who belong to this team, i.e. having a level greater than 0 for the Front Office skill. The other skills are also used for finer agent selection based on language knowledge.

To quickly add 100 agents to the Front Office team during a call peak, the manager opens the “Assignment of skills to agents” screen, then selects just the Front Office skill row and sets the level to 1 for 100 agents. All other skill levels are not changed, which is desirable because each of those 100 agents still has the same language level.

Creating a Skill during assignment

From a Skill assignment screen, you can create a new skill to be applied to target elements.

You must enter a name and press the Create Skill button. The new skill is created and added to the top list with level set to 1. Other selected skill rows and associated levels are not modified.

At this point it is still possible to modify the skill levels; the actual assignment is performed when the Save button is pressed.

Applying a Skill Template during assignment

In a Skill assignment screen, selecting a Skill Template from the drop-down list and pressing the Apply Template button merges the top list with this template.

Skills that were not yet selected or with a lower level are changed to match the skill levels in the template. Selected skills that do not belong to the template and skills that were already selected with a higher level than in the template are not modified.

At this point it is still possible to change the skill levels; the actual assignment is only performed when the Save button is pressed.

SEARCH FILTERS

In some lists and assignment screens, search filters can be applied so that the list items only include those matching the filter.

AGENTS MATCHING A GIVEN SKILL AND LEVEL

This filter restricts the list of Users (agents) to show only those whose skill level is greater than or equal to a given value for a specified skill.

Multiple skills can be selected, in this case agents are shown if they match any of those skills.

AGENTS MATCHING THE SKILLS OF A SERVICE GROUP

This filter restricts the list of Users to display only those who have sufficient skill levels to serve a Service Group.

It is possible to filter Users based on the first, second and / or third skill choice of the Service Group.

Multiple Service Groups can be selected, in this case agents are shown if they are skilled to serve any of those Service Groups.

AGENTS WHO BELONG TO AN AGENT GROUP

This filter restricts the list of Users to include only the members of a given Agent Group.

Multiple Agent Groups can be selected, in this case agents are shown if they belong to any of those Agent Groups.

AGENTS CONFIGURED WITH AN OBJECT TAG OR TAG DATA

If Object Tags are defined in Configuration Manager, they can be assigned to agents. Applying the Object Tag filter restricts the list to only agents who have the selected Object Tag assigned to the Agent in Configuration Manager. This list can be further filtered by selecting Object Tag Data values, so that only agents with the selected object tag data value(s) are displayed.

SERVICE GROUPS MATCHING THE SKILLS OF AN AGENT

This filter restricts the list of Service Groups to display only those that a chosen User (agent) is sufficiently skilled to serve.

It is possible to filter Service Groups based on the first, second and / or third skill choice.

SERVICE GROUPS CONFIGURED WITH AN OBJECT TAG OR TAG DATA

If Object Tags are defined in Configuration Manager, they can be assigned to service groups. Applying the Object Tag filter restricts the list to only service groups which have the selected Object Tag assigned to the Service Group in Configuration Manager. This list can be further filtered by selecting Object Tag Data values, so that only service groups with the selected object tag data value(s) are displayed.

CALL MANAGER RESOURCES

On systems configured with Telephony Application Service (TAS), Web Manager can be used for the configuration of Call Manager Resources.

See the Web Applications Configuration Guide for instructions on how to enable this functionality.

BVDS

Basic Virtual Devices (BVDs) can be created and deleted from Web Manager. They cannot be modified after creation.

LANGUAGES

New Languages must be associated to an existing Play Message List upon creation.

The **Prompt path** determines where audio files corresponding to Sound Media Objects will be uploaded (under the “upload path prefix” folder configured in web.config).

PLAY MESSAGE LISTS

A Play Message List must be associated to a Language before the list of Play Messages is enabled in Web Manager.

PLAY MESSAGES

Each Play Message must be created with a unique Number in the Play Message List.

Media Objects can be created, changed, deleted and reordered (Up or Down the list).

Sound Media Objects can be uploaded. The uploaded audio file must use one of the supported codecs such as A-Law PCM 8kHz. They are automatically renamed according to the Media Object value as part of the upload process.

Sound Media Objects can also be generated using Text-to-Speech (see the Web Applications Configuration Guide for details on how to enable this). Note that if literal TTS strings are entered, they must be enclosed in single quotes, not double quotes.

SCHEDULED CONFIGURATION

Most assignment screens allow modifications to be applied immediately or to be scheduled for future application. Those changes can also be repeated at regular intervals.

PLANNING CHANGES TO THE CONFIGURATION

ASSIGNMENT OF SKILLS TO AGENTS

This scheduled change consists in assigning a list of Skills, each one with an associated level, to a list of agents (Users).

Removing a skill from agents is possible by selecting a level equal to 0 (zero) for this skill.

Partial skill assignment or full skill reset

Any number of skills are assignable during a given scheduled change: it is not mandatory to set a new level for all Skills defined in the system (or tenant). Skills that are not selected keep their current level when the scheduled change is applied.

On the contrary, it is also possible to schedule a complete reset of all Skills and levels to predefined values. For this, all Skills defined in the system (or tenant) must be selected and a corresponding level specified (0 to remove the Skill) when defining the scheduled change.

ASSIGNMENT OF SKILLS TO SERVICE GROUPS

This scheduled change consists in assigning a list of Skills, each one with an associated level, to a list of Service Groups.

Adding and removing a second or third skills choice is also plannable. A scheduled change allows modifications of the first, second and third skills choices in a single operation.

Removing a skill from Service Groups is possible by selecting a level equal to 0 (zero) for this skill.

Partial skill assignment or full skill reset

Here also any number of skills are assignable during a given scheduled change. Skills (and skill choices) that are not selected keep their current level when the scheduled change is applied.

It is also possible to schedule a complete reset of all Skills and levels to predefined values. For this, all Skills defined in the system (or tenant) must be selected (for each choice if multiple ones are selected) and a corresponding level specified (0 to remove the Skill) when defining the scheduled change.

ASSIGNMENT OF AGENTS TO AN AGENT GROUP

This scheduled change consists in assigning a list of agents to an Agent Group.

De-assigning agents from an Agent Group must be done by assigning them to another Agent Group. (This is not specific to the configuration scheduling.)

TRIGGERS

DAILY SCHEDULE

A daily schedule is triggered every N days, where N can be chosen in the [0, 366] interval.

The default value for N is 0 (no repetition): such a schedule therefore corresponds to a one-shot planned configuration change.

WEEKLY SCHEDULE

A weekly schedule is triggered every N weeks, where N is in the [1, 53] interval. The default value for N is 1 (every week).

Optionally, one or more weekdays can be selected to indicate when the change should be triggered within the week. If multiple days are selected the change will be triggered multiple times during the week.

TRIGGER TIME AND VALIDITY INTERVAL

Whatever the chosen frequency, it is possible to specify an activation date and time as well as an optional expiration date and time for the scheduled change.

The default activation date is the date at which the scheduled change is defined. The activation trigger time can also be specified, by default it is set to one hour later than the current time.

If no expiration date and time are specified, the scheduled change is valid forever (until it is manually deleted).

ENABLING AND DISABLING A TRIGGER

An option controls whether a given trigger is enabled (active) or disabled.

By default, when scheduling a new configuration change the corresponding trigger is enabled.

MANAGEMENT OF SCHEDULED CHANGES

At any time, the list of all scheduled configuration changes is accessible for review from the overlay menu.

It is possible to edit an entry, either to modify the associated configuration change (target agents or skill levels for instance) or to redefine its trigger options (such as the frequency).

After selecting one or more entries from the list, it is also possible to enable (activate), disable or delete them in a single operation.

REAL-TIME SUPERVISION

Note: *this section describes predefined, hard-coded supervision screens.*
Refer to the Wall Display section to learn how to create custom real-time supervision screens.

In several screens, supervision data is displayed and updated in real-time to help the user make decisions for day-to-day management of the contact center.

Web Manager gets real-time information for Service Groups and Users from RTI service. By default, all Service Groups and Users are monitored in RTI service. If you switch to monitor selected Service Groups, please make sure you select all Service Groups and Users that you want to show real time information in Web Manager, by using the Real Time Interface Service Configuration tool.

USERS LIST

Each row in a list of Users displays the following real-time supervision data.

- State of the agent: Logged Off, Servicing, Idle, Not Ready, Incoming, etc.
- Ready or not ready for the various media: Voice, E-mail & SMS, Open Media, Chat.

Note: When Agent Privacy is enabled, the Real-time state and Ready state are not displayed.

SERVICE GROUPS LIST

Each row in a list of Service Groups displays the following real-time supervision data.

- Service Level percentage, changing color from green to red when under the target.
- Number of sessions / calls in queue.

- Longest wait time.
- Free agents vs. logged on agents.

INDIVIDUAL SERVICE GROUP

Clicking the name of a Service Group in the Service Groups list opens its individual supervision screen, which is divided into multiple panels.

Some panels show data computed on the performance interval (identified by the ↔ symbol) while some other data represent instantaneous values (identified by the ϟ symbol). The performance interval duration is indicated at the bottom of the screen.

The top left gauge indicates the service level configured threshold (in the title). The needle position corresponds to the service level value (for the current performance interval), shown in a red or green section depending on the **Service Level Goal**.

The top middle gauge indicates the abandon rate (for the current performance interval) as the needle position. If an **Abandon Rate Above** threshold has been defined for this Service Group, the gauge is divided into corresponding green and red sections.

The top right pie chart contains a summary of the sessions received during the current performance interval. The numbers of sessions answered, abandoned and overflowed out are represented by different sections, and the total number of sessions is indicated in the panel title.

The bottom left pie chart shows the repartition of currently logged on agents among those who are free, busy, busy (other) and unavailable. The total number of logged on agents is indicated in the panel title.

The bottom right sub-panel displays data related to currently waiting sessions.

- Total number of waiting sessions (in the title).
- Longest waiting time.
- Estimated waiting time for all configured skill choices, as well as the currently active skill choice.

Numbers that exceed the thresholds configured for the Service Group in Configuration Manager (**Number of Calls in Queue**, **Actual Waiting Time** and **Estimated Waiting Time** respectively) are highlighted.

DIRECT SCREEN ACCESS

All screens that show real-time supervision data are designed to be directly accessed. They can therefore be bookmarked in a web browser or shown in a MiContact Center Agent tab separately.

To hide the unnecessary top area and toolbar, the following query string can be appended to the URL of such screens:

?hideTop=true&readOnly=true

For instance, the Users list screen can be directly accessed through the following URL.

http://<MiCCEntServer>/WebApps/ContactCenter/Users?hideTop=true&readOnly=true

To create direct access links, the same query string parameters can be added to the URL of the Service Groups list or the URL of the supervision screen of an individual Service Group.

WALL DISPLAY

Custom supervision screens composed of a number of panels can be created and arranged freely.

Each panel shows values obtained from a data source (RTI object, database, etc.). These values can be represented in various numerical and graphical ways.

Screens are accessible via unique URLs for easy sharing.

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SUPERVISION SCREENS

SCREEN CREATION

To create a new screen, press the New button in the Wall Display Screens toolbar. As soon as the screen name has been saved, new panels can be added to the newly created screen.

By selecting an existing screen and pressing Copy as New, the selected screen is used as a template for the new one. Each panel of the template screen is copied into the new one as well.

SHAREABLE URLS

A unique random URL is assigned to each supervision screen upon creation. Opening this URL in a web browser shows the panel values and updates them according to their refresh interval.

From the list of Wall Display Screens, selecting rows defines a URL for the sequence of chosen screens. Browsing to this URL shows all screens in a loop, respecting their display duration.

These URLs are designed to be shared at will (in email messages for instance). Indeed, the corresponding display pages do not require a Web Manager license and may be accessed anonymously (without prior authentication).

FULL SCREEN DISPLAY

When displaying screens via one of the shareable URLs, switching the web browser to full-screen mode is recommended. The usual shortcut key for this purpose is **F11**.

Depending on the web browser used, it may also be possible to start it in full-screen or “kiosk” mode using command-line parameters.

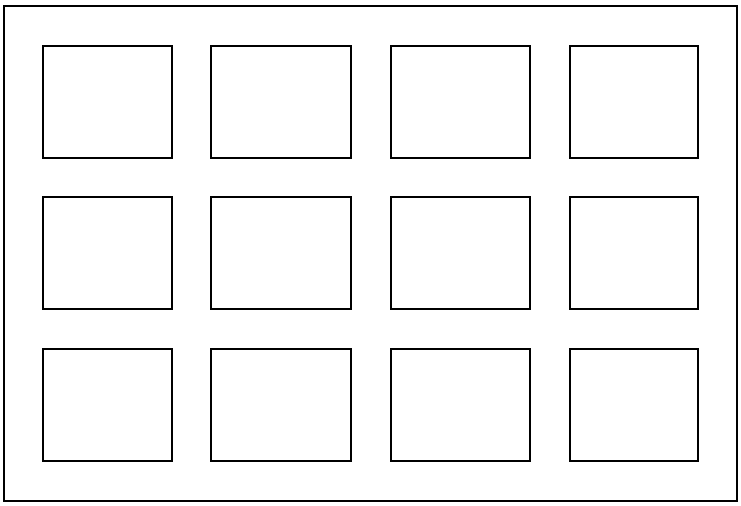
ADVANCED STYLING

The appearance of Wall Display screens can be customized by checking the Advanced styling option. The styling rules (CSS) defined will be applied to the screen upon rendering. Note that the CSS entry can have a maximum length of 1024 characters. Additional characters entered will be truncated and may result in an incorrect display.

LAYOUT

BASIC GRID

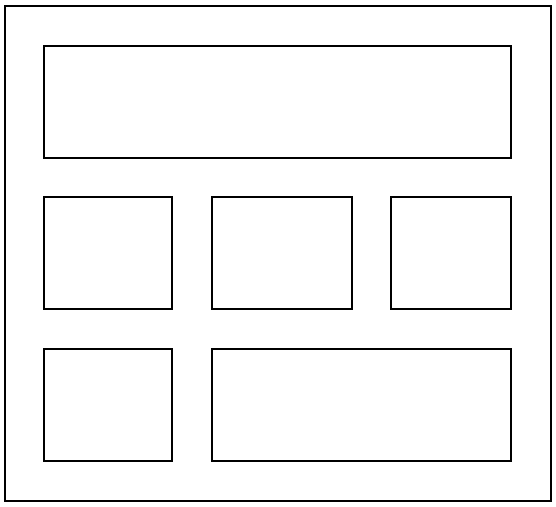
A screen is composed of one or more rows. Row are split horizontally to hold panels, resulting in a grid layout.



ENLARGING PANELS

While panels showing an individual value typically have a small size, some panels such as lists may require a larger width. For this reason, each row can hold a different number of panels.

Each panel spans a single column in the screen grid by default. To make a panel wider, increase its Column span property.



In addition, the respective heights of panels and rows can be adjusted. Each panel is created with a default Minimum height of 100, which can be increased to make it occupy more vertical space.

PANELS

STRUCTURE

A panel is composed of a main area showing the value(s) or graph, and an optional header containing the name. To hide the header, uncheck the Visible header option.

VALUE FORMAT

By default, Value and Detailed list panels show the raw values provided by the data source. However, a custom format can be specified for each data column displayed by the panel.

To add a specific format to the first (and possibly only) data column, press the Clear formats button, then enter a prefix and a suffix (optional), select one of the available formats from the drop-down list and press the Add format button.

Additional formats can be appended for the next columns if needed.

BOUNDS AND THRESHOLDS

Panels showing vertical axis, such as the Progress bar and Gauge, require the upper and lower bounds to be specified, in the Minimum and Maximum value fields.

Most panels are capable of highlighting values that exceed a configurable threshold.

The direction (whether a value exceeds it when greater or lower than the threshold) is selectable via the Ascending and Descending values options.

Up to three different, optional thresholds can be defined:

- Display: value is shown on the screen,
- Warning: value is highlighted in yellow color,
- Alarm: value is highlighted in red color.

GRAPH OPTIONS

Panels showing graphs can be customized by checking the Graph options box and specifying chart-specific options, such as the list of bar / line colors used in Vertical bars and Line panels, and a suffix (unit) for vertical axis values.

Other options may be applied to the graph by editing the JSON object manually. Refer to the RGraph library documentation for the list of options that are compatible with the various charts.

PANEL TYPES

The appearance of a panel is determined by its type: value, progress bar, pie chart, etc. Each type of panel requires a specific number of data rows and columns, returned by the data source according to its Select command.

TYPE	DESCRIPTION	DATA	SAMPLE SELECT COMMAND
Value	The simplest panel, which just shows a single value from a data source.	1 row, 1 column	SELECT TOP 1 [Value] FROM …
Vertical progress **Horizontal progress**	A widget that is appropriate to display a numeric value within a given range. The alarm and warning thresholds (if defined) are visible even when the value does not exceed it.	1 row, 1 column	SELECT TOP 1 [Value] FROM …
Gauge	An alternative way of displaying a numeric value in a range, or a percentage. The alarm threshold is represented by a red color for the corresponding sector. If a warning threshold is defined, an orange sector is added.	1 row, 1 column	SELECT TOP 1 [Value] FROM …
Vertical bars	This chart is convenient to display similar values side by side, or to compare the values of a single property for multiple similar objects.	M row, N columns	SELECT TOP 1 [Idle], [Busy], [Lunch break] FROM … SELECT [Waiting Calls] FROM … WHERE [ServiceGroupID] IN (…)
Pie chart	A useful panel to compare similar or related values.	1 row, N columns	SELECT TOP 1 [Idle], [Busy], [Lunch break] FROM …
Detailed list	A table showing multiple values of multiple elements. The column positions are specified in the Select command.	M rows, N columns	SELECT TOP 5 [Name], [Calls], [Busy duration], [Idle duration] FROM …

Line	A graph typically used to represent the evolution of one or more value(s) over a specified period. The time range is determined by the Select command and must be returned in the first column of the query result.	M rows, N columns (N ≥ 2)	SELECT [Time], [Abandoned calls] FROM … SELECT [Time], [Received calls], [Abandoned calls] FROM …
Web page	A container for any web page to integrate in a supervision screen.	(None)	(None)

DATA SOURCES

Each panel has an associated data source, from which values to display are fetched.

Most data sources must be configured with a Select command using SQL syntax. External data sources also require a Connection string.

To facilitate data source configuration, a number of predefined Select commands and Connection strings are provided. Use the Test button to check if data source parameters are correct: the resulting sample or error message will be shown in a popup table.

REAL TIME INTERFACE PERFORMANCE

The Performance objects of the Real Time Interface can be selected as panel data sources. All numeric and string values exposed by these objects are available.

OBJECT	DESCRIPTION
Service Group performance	Provides all values exposed by the **IServiceGroupPerformance** RTI object.
Agent performance	Provides all values exposed by the **IAgentPerformance** RTI object.
Agent Service Group performance	Provides all values exposed by the **IAgentServiceGroupPerformance** RTI object.
Service Access performance	Provides all values exposed by the **IServiceAccessPerformance** RTI object.

Note: *Agent Service Group performance is disabled by default on MiCC Enterprise systems. To enable this event source, it is necessary to select the option "Allow Agent Detail Monitoring" on the Real Time Interface tab of the MiCC Enterprise Registry Configuration application (SeCCfg.exe) and restart the Real Time Interface service.*

When selecting one of the Performance data sources, a base Select command is prepared. Use the drop-down lists and Add buttons to complete this Select command.

- At least 1 column must be specified (SELECT part of the command).
- At least 1 source object must be selected (WHERE part of the command).

The panel will show columns in the specified order (SELECT part of the command).

To change or translate the column names (displayed on some panels such as the Detailed list and Pie chart), specify an alias by modifying the AS part of the Select command that corresponds to the column to rename.

Example

```
SELECT [GroupName] AS [Name], [LongestWaitTime] AS [Longest wait], [CallsInQueue]
AS [Calls in queue]
FROM [ServiceGroupPerformance]
WHERE (GroupID IN (2, 4))
```

The WHERE clause is subject to the following constraints and capabilities.

- Must be enclosed in parentheses.
- Must start with `AgentID IN (...)`
- Can include additional conditions on other fields.
- Can include conditions on fields that are not in SELECT part.

Example

```
SELECT [AgentName] AS [Ready agents]
FROM [AgentPerformance]
WHERE (AgentID IN (1, 2, 3) AND AgentState = 2)
```

Results can be sorted via an ORDER BY clause.

Example

```
SELECT [AgentName] AS [Logged on agents]
FROM [AgentPerformance]
WHERE (AgentID IN (1, 2, 3) AND AgentState > 1)
ORDER BY AgentState DESC
```

In WHERE and ORDER BY clauses, fields can be referenced by original property name or by alias.

Example

```
SELECT [AgentName] AS [Logged on agents], [AgentState] AS [Agent state]
FROM [AgentPerformance]
WHERE (AgentID IN (1, 2, 3) AND [Agent state] > 1)
ORDER BY [Agent state] DESC
```

Aggregate functions (SUM, AVG, MIN, MAX) may be used when selecting multiple source objects from a Performance data source.

Example

```
SELECT SUM([CallsInQueue]) AS [Calls in all queues], MAX([LongestWaitTime]) AS
[Longest waiting time]
FROM [ServiceGroupPerformance]
WHERE (GroupID IN (3, 2))
```

When displaying Agent state, Call state, Call sub-state or Ready / Not Ready status from the **Agent performance** data source in a Value panel or a Detailed list, a specific format can be applied to change the numerical value into a localized string representation.

For instance, Call state value 3 with format “{0:cs}” is displayed as “Talking”.

This format is applied by default when configuring a new Panel.

DATABASE

Any database can be queried as a data source, provided that a compatible driver is installed on the MiCC Enterprise web server.

In addition to the Select command, a valid Connection string must be entered to configure these data sources. A number of predefined connection strings can be selected from the drop-down list, and then manually adapted.

OBJECT	DESCRIPTION
ODBC	Provides access to databases and other sources compatible with ODBC.
OLE DB	Provides access to databases and other sources compatible with OLE DB.

The predefined connection string named “MiCC Enterprise DB” is convenient to query the nextccdb database, using a Select command such as the one in the following examples.

Examples on historical activity data

The following Select command fetches the maximum value for 3 columns from the Service Group Activity table. The resulting data would be conveniently displayed in a Vertical bars or Pie chart panel.

```
SELECT MAX([direct_in_cnt]) AS [Direct In]
      ,MAX([ovfl_in_cnt]) AS [Overfl. In]
      ,MAX([ovfl_out_cnt]) AS [Overfl. Out]
FROM [nextccdb].[dbo].[srv_grp_act_view]
WHERE [srv_grp_name] = 'Support'
GROUP BY [srv_grp_name]
```

The following Select command fetches the evolution of the number of calls to a Service Access for the current day. The resulting data would be best displayed in a Line panel.

```
SELECT CONVERT(VARCHAR(5),[time_from], 108) AS [Time]
      ,[direct_in_cnt] AS [Direct In]
FROM [nextccdb].[dbo].[srv_access_act_view]
WHERE [srv_access_name] = 'SA-Support'
       AND [time_from] > CONVERT(date, GETUTCDATE())
```

The following Select command fetches the number of calls in queue from the selected service groups and provides a summary value:

```
SELECT SUM([calls_in_que]) AS [Calls in queue]
FROM dbo.net_monitor_data
```

```
WHERE (service_grp_id IN (5,7,14))
```

Note: Maximum of 25 items can be provided in the Select query to avoid performance issues with processing large datasets.

URL

This data source represents a web location from which data or web page contents must be retrieved.

This data source is typically associated with a Web page panel.

RANDOM

This dummy data source is available for demonstration purposes.

PARAMETRIZED DATA SOURCE

In the Select command of a data source, the special parameter “%A%” may be inserted, which represents the Agent Record ID of a particular agent.

In this case, the shareable URL of the screen must provide the actual parameter value via the “agentID” query string parameter.

Example

http://localhost/WebApps/ContactCenter/WallDisplayScreens/Display?current=s343223**&agentID=5**

REPORTS

The supervision capabilities available in Web Manager include generation of reports on configuration and archive data.

The application provides a report on configured skill levels, performance reports on agents, service groups and agent groups, as well as availability reports on agents.

REPORT GENERATION

SELECTION OF INCLUDED OBJECTS

All reports are available under a drop-down menu from the Web Manager screen showing the list of objects to include:

- Users,
- Service Groups,
- Agent Groups.

Search filters are thus available prior to generating a report, allowing for instance to select all Users who belong to a given Agent Group.

DATE AND TIME RANGES

After selecting a few objects from the list and choosing a report from the drop-down menu, the report is generated on a time range corresponding to the whole current day.

The date range is then configurable, as well as the time interval within each day of the date range.

Modifications of the date and time ranges have no effect on the originally selected objects shown in the report (Users for instance).

LAYOUT

All data for a given report are displayed in a single interactive table, which provides additional filtering mechanisms and capabilities.

- Sorting.
- Pagination: number of visible rows, navigation between pages.
- Search for specific objects matching a prefix.
- Download data in CSV format.

USER / AGENT REPORTS

SKILLS

This report displays all skills and levels currently assigned to each selected agent.

PERFORMANCE

This report shows how the selected agents handle calls that are presented from each queue (Service Group).

Its columns display the source Service Groups and corresponding media, the number of sessions offered to the agent, answered, rejected, abandoned, timed out, transferred to various destinations, with assistance received and provided.

Data are grouped by agent.

TRANSFERS TO SERVICE GROUPS

This report shows the number of calls from a specific Service Group that have been transferred by the selected agents to other Service Groups.

Its columns display the source Service Group, target Service Groups and number of sessions transferred by the agent to this target Service Group.

Data are grouped by agent.

TRANSFERS TO AGENTS

This report shows the number of calls from a specific Service Group that have been transferred by the selected agents to other agents.

Its columns display the source Service Group, target agent and number of sessions transferred by the agent to this target agent.

Data are grouped by agent.

TRANSFERS TO INTERNAL NUMBERS

This report shows the number of calls from a specific Service Group that have been transferred by the selected agents to internal phone numbers.

Its columns display the source Service Group, target phone number and number of sessions transferred by the agent to this target number.

Data are grouped by agent.

TRANSFERS TO EXTERNAL NUMBERS

This report is identical to the previous one but shows the number of calls transferred by the selected agents to external phone numbers.

AVAILABILITY

This report shows the time spent by all selected agents in Ready and Not Ready status for each media.

Its columns display the first login and last logout of the selected agent during the date range, along with the Ready and Not Ready durations for Voice, Chat, Message and Open Media.

UNAVAILABILITY BY REASON

This report shows the Not Ready durations broken down by media and Not Ready Reason, for the selected agents.

Its columns display the media, Not Ready Reason and time spent in Not Ready status for this media with this reason.

SERVICE GROUP REPORTS

PERFORMANCE

This report shows how calls from the selected queues (Service Groups) are handled.

Its columns display the number of sessions incoming, answered, abandoned, overflowed, and transferred to various destinations.

Data are grouped by media.

TRANSFERS TO SERVICE GROUPS

This report shows the number of calls that have been transferred from the selected Service Groups to other Service Groups.

Data are grouped by source Service Group.

TRANSFERS TO AGENTS

This report shows the number of calls from the selected Service Groups that have been transferred to agents.

Data are grouped by source Service Group.

TRANSFERS TO INTERNAL NUMBERS

This report shows the number of calls from the selected Service Groups that have been transferred to internal phone numbers.

Data are grouped by source Service Group.

TRANSFERS TO EXTERNAL NUMBERS

This report is identical to the previous one but shows the number of calls transferred from the selected Service Groups to external phone numbers.

AGENT GROUP REPORTS

PERFORMANCE

This report shows how calls from agents in the selected Agent Groups are handled.

It is identical to the Performance report on agents, with data grouped by Agent Group.

TRANSFERS TO SERVICE GROUPS

This report shows the number of calls that have been transferred by agents in the selected Agent Groups to other Service Groups.

It is identical to the same report on agents, with data grouped by Agent Group.

TRANSFERS TO AGENTS

This report shows the number of calls that have been transferred by agents in the selected Agent Groups to other agents.

It is identical to the same report on agents, with data grouped by Agent Group.

TRANSFERS TO INTERNAL NUMBERS

This report shows the number of calls that have been transferred by agents in the selected Agent Groups to internal phone numbers.

It is identical to the same report on agents, with data grouped by Agent Group.

TRANSFERS TO EXTERNAL NUMBERS

This report shows the number of calls that have been transferred by agents in the selected Agent Groups to external phone numbers.

It is identical to the same report on agents, with data grouped by Agent Group.

OPERATIONAL MESSAGES

A team supervisor can send operational messages to agents from Web Manager. Operational messages are displayed immediately in their Agent application if the recipient is logged in. If a message is sent while the agent is logged off, it will be shown just after the agent logs in (unless the message has expired).

Agents can also use Web Manager to have access to their own message history in the Inbox.

SUPERVISOR VIEW

When the Operational Messages entry is opened from the menu, the list of all operational messages is displayed, latest first.

The logged on user must have “Configuration Manager – Manage User” or “Manage User (within Agent Group)” privileges, otherwise the list is empty and message creation is forbidden.

DEFAULT DISPLAY

The operational messages list shows the activation date and time, expiration date and time if specified, sender name the recipients list (see below). The full message is displayed, including formatting (bold, colors, etc.).

FILTERING ON DATES

To only show operational messages that have been created or activated within a particular date range, use the Filter option.

RECIPIENTS

Since each operational message can be sent to many agents, the detailed list of recipients is collapsed by default. Use the + / - button to expand or collapse it.

If a message was sent to all agents matching a filter on Agent Groups, Service Groups or Skills, then the Recipients column shows the selected filter criteria.

SENDING AN OPERATIONAL MESSAGE

Pressing the New button in the operational messages toolbar opens the message creation screen.

By selecting an old message and pressing Copy as New, the selected message is used as a template for the new operational message.

COMPOSING

Use the editor in the top area to compose the message. Basic formatting options are available such as bold, italics, underline, foreground and background color. The usual keyboard shortcuts are supported (example: Ctrl+B for bold).

ACTIVATION AND EXPIRATION

The activation time of a new operational message is set to the current moment by default, but it can be set to a later date and time. Agents will receive the message as soon as the activation time is reached.

The expiration time is optional. Operational messages sent while agents are logged off will be displayed the next time they log in, unless the expiration time is elapsed.

RECIPIENTS

The Users list at the bottom of the screen is used to select the message recipients. Select one or more rows in this list to specify who should receive the new message.

It is possible to send the message to all agents matching a particular filter. Open the Filter area, select one or more Agent Groups, Service Groups or Skills and press Apply Filter. All matching agents are then selected automatically. If you don't deselect any row at this point, then the message is considered as being sent to the selected Agent Group(s), Service Group(s) or Skill(s).

Multiple Agent Groups, Service Groups or Skills can be selected from the list. Use Ctrl+click or Shift+<arrow key> to perform multi-selection.

INBOX

The Inbox entry (under Operational Messages in the menu) opens the agent history, which contains all operational messages sent to the currently logged on user.

No privileges are required to open the Inbox.

DEFAULT DISPLAY

The Inbox list shows the activation date and time, expiration date and time if specified, sender name and full message, including formatting. The recipients list is not displayed.

FILTERING ON DATES

Use the Filter option to only show operational messages that have been received within a date range.

AUTOMATIC REFRESH

Operational messages are normally received in the Agent application. However, the Inbox screen can also be used to monitor messages, as it is refreshed automatically and will show new operational messages as they are sent by a supervisor.

DIRECT ANONYMOUS ACCESS TO THE INBOX

If the “EnableAnonymousAccess” option is set to “true” in the web.config file, the Inbox of a user becomes accessible without prior authentication, at the following location:

/WebApps/ContactCenter/PendingMessages/UserInbox?logon=<Logon ID>

or on tenanted systems:

/WebApps/ContactCenter/PendingMessages/UserInbox?logon=<Logon ID>&tenant=<Tenant Name>

LEAVING THE APP

As a web application, the Web Manager terminates when the browser window is closed or used for navigating to another URL.