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## User Interface

ClickSchedule's user-friendly graphic interface provides a visual display of all the scheduled tasks for each resource on a day-by-day basis.

The **Resource Gantt** displays a list of resources together with their scheduled tasks. It provides you with a comprehensive view of the resource's schedule, giving you an immediate indication of the resource's availability.

The **Job List** provides a comprehensive view of the task workload and the tasks assigned to each resource. It enables you to receive quick answers to task-related questions such as:

- Which tasks are more urgent than others?
- Which tasks required by the customer have not yet been scheduled?
- Which tasks are in jeopardy?

## Typical Workflow

First, you access the Web client in your Internet browser and select the business entity and time period for which you want to display data. The business entity (region, district, or so on) is selected in the Business Structure tree, which displays only those entities for which you have the necessary authorizations, according to the policies of your organization.

Next, to facilitate management of your task workload, you can apply a filter to define which tasks are displayed on your Job List, for example, unscheduled tasks.

You can then edit the schedule interactively using ClickSchedule's scheduling tools, for example, by scheduling unscheduled tasks. You may first want to find a resource that is appropriate for the task by looking at the Resource Form or using the Resource Gantt filters. You can then select the task and schedule it by dragging and dropping it onto a resource on the Resource Gantt chart. Alternatively, you can select a task and then select the **Get Candidate** option to view the availability of qualified resources, and then schedule the task accordingly.

If any rule violations occur, you can view the Rule Violations dialog box and decide whether to schedule the task anyway or look for a more suitable scheduling option. Once the task has been scheduled, you can view its updated task details in the ClickSchedule Task Form in order to relay the new task information to the appropriate resource.

# Job and Resource Terms

## Task Terms

The following is a list of task terms that can be viewed in the ClickSchedule Task Form or in the Job List. These terms are used by ClickSchedule when creating new tasks, editing existing tasks and scheduling them.

- **Address:** The city address of the location in which the task is to be performed. The address includes the physical location, city, state, country, and postal code. A task must always have an address.
- **Appointment Finish:** The time that the appointment has been scheduled to finish.
- **Appointment Start:** The time that the appointment has been scheduled to start.
- **Call ID:** The Order number, which is specified by SAP system.
- **Calendar:** The type of working For example, the 7dx24h calendar would be used if your customer's organization operates on a 7-day, 24-hour work week. The calendar may also apply to a specific task, rather than to an entire organization.

- **Confirmation Date:** The date and time at which the resource confirmed or acknowledged receiving the schedule.
- **Contact Date:** The date and time at which the resource was contacted to notify him or her about the schedule.
- **Contact Name:** The contact name of the customer.
- **Contact Phone:** The phone number where the customer can be contacted.
- **Contract Type:** Specifies the type of contract held with the customer. This can be taken into consideration when scheduling a task.
- **Critical:** The task must be scheduled, even if other stages of the multi stage task cannot be automatically scheduled.
- **Customer:** The name of the customer or customer site.
- **District:** The area within the region in which the task is to be performed.
- **Due Date:** The date and time by which the task must be completed.
- **Duration:** The planned amount of time that the task will take to complete (net time).
- **Early Start:** The earliest date and time that a task can be started. For example, a service request may be received at 8:00 AM, but the request for service states that a resource cannot start to perform the task until 3:00 PM. Then, the early start time would be 3:00 PM.
- **Is Scheduled:** Whether the task has been scheduled (yes or no). This value is updated automatically by ClickSchedule as the task is scheduled or unscheduled, regardless of the method used.
- **Late Start:** The latest time and date by which a task must be started.
- **Number:** The number you assign to a task when it has subtasks. For example, when you have a task to repair a telephone system, Task ID 3039 (specified by the CRM/ERP system), you may have subtasks to repair each telephone in the system, to which you would assign the task numbers 1, 2, 3, and so on.  
**Note:** The combination of the Call ID and Number is a unique number that relates to that specific task.
- **Number of Required Resources/Resources:** The number of resources required to perform a task.
- **Open Date:** The date and time that the call was logged to the system.
- **Parts:** The spare parts required to complete the task.

- **Preferred Resources/Resources:** The name of the resource or resources to whom you would prefer to assign the task.
- **Priority:** The priority (importance) of the task. For example, a value of 1 indicates higher priority than a value of 10. Note that whether the higher value or the lower value indicates higher priority depends on how the Task Priority objective is defined by your system administrator or application resource.
- **Region:** The area in which the task is to be performed.
- **Required Resource/Resource Tools:** The tools (equipment) required to complete the task.
- **Required Resource/Resource:** The name of the resource or resources to whom this task should be scheduled.
- **Required Skills 1, 2:** The skills that are required, such as printer, monitor or network. A minimum required skill level value can be specified for a task.
- **Resource Dependencies:** The resource relationship between this task and another task. For example, the same resource must be used for both tasks. You can only define resource dependencies between tasks with the same Call ID, meaning tasks that belong to the same multi stage task.
- **Resource Type:** The type of resource required for the task. For example, beginner or expert.
- **Status:** The status of the task. For example, in progress or completed.
- **Task Type:** The type of job being requested. For example, installation, remedial or upgrade.
- **Time Dependencies:** The time relationship between this task and another task. For example, the task can only be started one hour after the completion of another task. You can only define time dependencies between tasks with the same Call ID, meaning tasks that belong to the same multi stage task.

## Resource Terms

The following is a list of resource terms that are used by ClickSchedule when defining new resources, editing their properties and scheduling their tasks. The resources terms can be viewed in the ClickSchedule Resource Form.

- **Active:** Yes or No, whether or not the resource is available for scheduling.
- **Address:** The address of the resource's home base. The address includes the physical location, city, state, country and postal code. A resource's home base designates the location from which he or she goes to his or her daily or weekly activity. It can be a home address, if that is where he or she starts the

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daily service route, an office address, or even the address of the location from which he or she collects the parts for the day.

- **Calendar:** The working calendar used by the resource. For example, if a resource works a 5-day, 8-hour work week, the calendar displayed will be **5dx8h**. The same calendar can be used by several resources, for example, a departmental calendar. A resource may also have his or her own calendar, designating a work pattern which is unique to the resource and his or her planned absences, for example, vacations.
- **Candidate:** A resource that is qualified, according to business rules, to perform a specific task.
- **District:** The area within the region to which the resource is assigned.
- **Efficiency:** The resource's overall efficiency level. This level is overridden by the specified skill efficiency level.
- **ID:** A unique number assigned to the resource.
- **Internal:** Yes or No, whether a resource is an internal employee or a subcontractor.
- **Name:** The name of the specified resource.
- **Parts:** The spare parts required by the resource to complete the task.
- **Region:** The area to which the resource is assigned.
- **Resource Type:** The type of resource, for example, resource or technician.
- **Skills:** The skills that the specified resource possesses, and the resource's skill level and efficiency for each of these skills. Regular and time-phased skills can be defined for both crews and resources.
- **Tools:** The equipment that a resource has available for use. For example, sometimes a task may require a resource to have specific tools to perform the task.
- **Travel Speed:** The speed (in meters per hour) at which the resource travels between tasks.





- **View List:** Enables you to determine the information displayed in the main display area. The following views are available:
  - **Scheduling view:** Displays a comprehensive view of the task workload and the tasks assigned to each resource, and enables you to manage the workload by performing various scheduling tasks, as described in Scheduling View.
  - **Resource Management view:** Displays the resource calendars, and enables you manage some aspects of resource availability, as described in Resource Management View.
  - **Crew Teaming view:** Displays the resources allocated to crews for a specific day, and enables you to handle instances of under or over-coverage allocation on-the-fly, as described in Managing Crew Coverage.
- **Note:** Additional views may be available if additional optional modules have been configured for your organization.
- **Main Display Area and Additional Panells:** Display scheduling and resource information according to the currently selected view.

## Menu Options

The menu bar in the ClickSchedule web client includes several menus, as described in the following sections.

### Main Menu

The Main menu includes the following options:

<b>Option</b>	<b>Description</b>
<b>Refresh</b>	Refreshes the on-screen display of data.
<b>Show Search Bar</b>	Opens/closes the Search area below the menu bar. For details, refer to Performing a Search.
<b>Exit</b>	Closes the application.

### View Menu

The View menu includes the following options:

<b>Option</b>	<b>Description</b>
<b>Show on Resource Gantt</b>	When a task is selected in the Job List, highlights the corresponding task on the Resource Gantt chart.

<b>Option</b>	<b>Description</b>
<b>Change to 24X7 /Work Week mode</b>	Sets the mode for displaying time intervals on the Gantt chart: <b>24x7</b> (all hours or all days) or <b>Work Week</b> (the standard range of working days and hours for your organization).
<b>Enable/Disable Mouse Hover on Gantt</b>	Enables/disables the highlighting of the tasks in a multi-stage task when the mouse hovers over one of the tasks in the chain.
<b>Show on Resource List</b>	When a scheduled task is selected in the Job List, highlights the assigned Resource in the Resources list.
<b>Show Crew on Resource List</b>	Indicates the members of a crew on the Resource list of Resource Gantt Chart.
<b>Show on Task List</b>	When a task is selected on the Resource Gantt chart, highlights the corresponding task on the Job List.
<b>Show on Map</b>	Indicates the location of a selected task or resource on the map.

## Schedule Menu

The Schedule menu includes the following options:

<b>Option</b>	<b>Description</b>
<b>Schedule Task(s)</b>	Enables you to schedule a task, as described in Scheduling Tasks.
<b>Get Candidates</b>	Displays a list of resources that have skills required for the selected task.
<b>Schedule Idle Resource</b>	Identifies scheduling gaps in a resource's schedule and schedule tasks accordingly, as described in Scheduling Tasks to an Idle Resource.
<b>Unschedule Task(s)</b>	Enables you to unschedule a task, as described in Uncheduling Tasks.
<b>Check Rule Violations</b>	Lists any scheduling rules that have been violated by the currently scheduled task in the Rules Violations dialog box, for example, violations involving travel time, vacation time and early start/due date time. For details, see Checking Rule Violations.
<b>Enable/Disable Snap Mode</b>	Enables/disables the automatic adjustment of the timing of a task in the schedule to prevent the scheduling of overlapping tasks and allow for travel time.

## Execute Menu

The Execute menu includes the following option:

<b>Option</b>	<b>Description</b>
<b>Update Status</b>	Enables you to update the status of a task, as described in Changing the Task Status.

## Monitor Menu

The Monitor menu includes the following options:

<b>Option</b>	<b>Description</b>
<b>Change Route Color</b>	Enables you to change the color of the line used to mark the selected route.
<b>Get Route for Day</b>	Retrieves the daily route for the selected resource.
<b>Clear /Resource Route</b>	Clears the selected route marking from the map.
<b>Clear All Routes</b>	Clears all route markings from the map.
<b>Get Route Directions</b>	Displays the driving direction for the selected route, as described in Viewing Route Information.
<b>Get A-B Route</b>	Displays the route between two points on the map, as described in Viewing Route Information.
<b>Change A-B Route Color</b>	Enables you to change the color of the A-B route on the map.
<b>Remove A-B Route</b>	Removes the A-B route from the map display.
<b>Remove Pushpin</b>	Removes a pushpin from the map.
<b>Get Closest Resources</b>	Identifies the resource located closest to the task location, as described in Identifying the Closest Resources to a Task.
<b>Show Assigned Tasks</b>	Creates a tab in Job List containing the tasks assigned to the selected resource.
<b>Show/Hide Time Interval</b>	Displays/hides the time interval slider, which enables you to change the time period for which data is displayed on the map.

## Workload Management Menu

The Workload Management menu includes the following options:

Option	Description
<b>Create New Task</b>	Enables you to create a new task, as described in Creating a New Task.
<b>Duplicate Task</b>	Creates a new task based on an existing task, as described in Duplicating a Task.
<b>Edit Task</b>	Enables you to edit the properties of an existing task, as described in Viewing and Editing Task Details.
<b>Delete Task</b>	Deletes the selected task.
<b>Save Task List</b>	Saves the Task List, or selected task entries, as an HTML file, as described in Saving the Task List.
<b>Print Task List</b>	Prints the Task List, or selected task entries, as described in Printing the Task List.
<b>Copy Task Identifier</b>	Copy the task identifier information to the clipboard, enabling you to copy it into other applications.
<b>Show Task Dependencies</b>	Lists the tasks that comprise an MST chain in a separate Task List tab, as described in Viewing Multi-Stage Tasks.




## Help Menu

The Help menu includes the following options:

Option	Description
<b>Help</b>	Displays the online help.
<b>About ClickSchedule</b>	Displays the software version information.

## Toolbar Options

The following toolbar buttons facilitate navigation within the ClickSchedule web client and provide easy access to its key functionality:

Button	Name	Description
	<b>Create New Task</b>	Enables you to create a new task, as described in Creating a New Task.
	<b>Create New Resource</b>	Enables you to create a new task, as described in Defining a New Resource.
	<b>Create New N/A</b>	Enables you to create a new non-availability (N/A) period, as described in Handling Resource Availability.

**Schedule Task(s)**

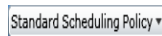
Enables you to schedule a task, as described in Scheduling Tasks.

**Unschedule Task(s)**

Enables you to unschedule a task, as described in Uncheduling Tasks.

**Check Rule Violations**

Lists any scheduling rules that have been violated by the currently scheduled task in the Rules Violations dialog box, for example, violations involving travel time, vacation time and early start/due date time. For details, see Checking Rule Violations.

**Select Business Policy**

Enables you to select the scheduling policy (rule set) to be applied to the schedule, as described in Viewing ClickSchedule Data. When you select a policy, all the rules and objectives that have been predefined for the policy are applied to the schedule.

**Save Task List**

Enables you to save the Task List as an HTML document.

**Print Task List**

Sends the Task List to the printer.

**Preview Task List**

Displays a preview of the Task List as it would appear in a print out.

**Time Interval Slider**

Displays the time interval slider on the map.

**Select zoom level**

Enables you to set the block of time (for example, day, week, or month) according to which data is displayed in the Scheduling view.

**Refresh**

Refreshes the on-screen display of data.

**Help**

Displays the online help.

**About ClickSchedule**

Displays the software version information.




**Search**

Displays the search area near the top of the window.

## Calendar Panel

The Calendar Panel is used to set the time period for which data is displayed.


### To set the time range:

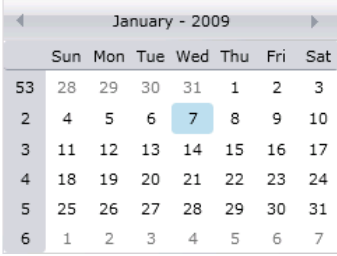
1. In the **From** period, enter the first date in the time period for which you want to view data or click the adjacent **Calendar**  button and select the date from the calendar that is displayed. (For details, refer to Selecting Dates from the Calendar.)
2. In the **To** period, enter the last date in the time period for which you want to view data or click the adjacent **Calendar**  button and select the date from the calendar that is displayed. (For details, refer to Selecting Dates from the Calendar.)
3. On the toolbar, click the **Refresh**  button. The information displayed is refreshed to reflect the new time period.

## Selecting Dates from the Calendar





When setting a date in the Calendar Panel or in any of the ClickSchedule web client forms, you can select the date from a graphic calendar.

### To select a calendar date:

1. Click the **Calendar**  button to display the graphic calendar. By default, the current month is displayed.



	Sun	Mon	Tue	Wed	Thu	Fri	Sat
53	28	29	30	31	1	2	3
2	4	5	6	7	8	9	10
3	11	12	13	14	15	16	17
4	18	19	20	21	22	23	24
5	25	26	27	28	29	30	31
6	1	2	3	4	5	6	7

2. To select a different month, do one of the following:
  - Click the **Next** arrow  to move to the next month or click the **Previous** arrow  to move to the previous month. Repeat as needed.
  - Click the name of the month to view the range of months in the current year. Select the required month.  
If you need to select a month in a different year, click the **Next** arrow  to move to the next year or click the **Previous** arrow  to move to the previous year and then select the required month.

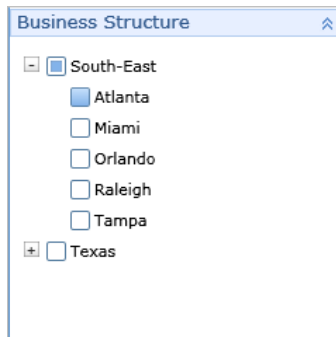
3. Once you have selected the necessary month and year, select the date from the displayed month.



## Business Structure Panel

The Business Structure Panel, shown below, enables you to specify the business entity for which data is displayed in the web client.

Task and resource data is loaded according to the selected business entity. You can view the data for more than one entity at a time.



Your organization's structure (for example, regions and districts) is displayed in the Business Structure Panel in a hierarchical tree format.



Although the Business Structure tree has multiple levels, the data to be viewed in the domain is selected by choosing an entity at the lowest level of the tree. To expand a branch in the tree, click . To collapse a branch in the tree, click .

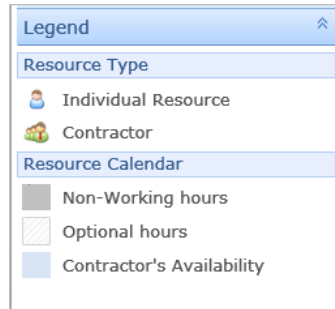
The tasks and resources for the selected entity are displayed on the Resource Gantt chart and Job List for the time period defined in the Scheduling Calendar Panel.

The Business Structure Panel can be collapsed or expanded.

- To collapse the Business Structure Panel, click the **Collapse** button  in its header. The Panel is collapsed; only its header remains in view.
- To expand the Business Structure Panel, click the **Expand** button  in its header.



## Legend

ClickSchedule uses specific icons, color schemes, and shading patterns in each of the views to indicate tasks, resources, working time, and so on. A legend of these items is displayed in the Legend Panel, which is located under Additional Panels. The Legend Panel is common to both the Scheduling and Resource Management views.




**Note:** The use of color-coding and icons is configured as part of the integration process; therefore the colors and icons used by your organization may differ from those shown in the example above.

The Legend Panel can be collapsed or expanded.

- To collapse the Legend Panel, click the **Collapse** button  in its header. The Panel is collapsed; only its header remains in view.
- To expand the Legend Panel, click the **Expand** button  in its header.

## Pinning and Unpinning Panels

The various Panels in the ClickSchedule web client can be minimized (unpinned) and maximized (pinned) to facilitate easier viewing of key data at any given time.

To minimize a Panel, click the **Pin**  button in the title bar of the Panel. The Panel is minimized so that only its title bar appears, making more space on the page available for the display of other information.

To maximize a Panel, click the title bar. The Panel is restored to its default size and location.

## Scheduling View

The Scheduling view enables you to manage the workload by performing various scheduling tasks, including creating, scheduling, and unscheduling tasks and non-availability periods. At the same time, the Scheduling view provides a comprehensive view of the task workload and the tasks assigned to each resource.



To display the Schedule view, click **Schedule** at the bottom of the Navigation Panel.

The Schedule view comprises the following key components:

- **Resource Gantt:** Shows the scheduled tasks for each resource, enabling you to review, modify, and unschedule these tasks. The Resource Gantt Panel also includes a Map view. For details, see Resource Gantt Panel.
- **Job List:** Displays information about all the tasks that have been transferred from the CRM/ERP system to ClickSchedule, enabling you to schedule, unschedule, or reschedule tasks. For details, see Job List.
- **Legend:** Describes the specific icons, color schemes and shading patterns use to indicate the status of tasks, types of resources, types of working time, and so on. For details, see Legend.

## Resource Gantt Panel

The Resource Gantt Panel is a dynamic work area that shows the scheduled tasks for each resource for the selected time period and business entity. It includes the Resource Gantt chart, the Resources List, and the Map view.

Along the top of the Resource Gantt chart, the date is displayed according to the range specified in the Time Definition Panel. The block of time displayed in the view, as selected from the dropdown list on the toolbar, for example, Day, Week or Month. (The available resolutions are subject to configuration.) To move to the next time block in the specified date range, click the **Previous**  or **Next**  button on the Resource Gantt chart.

The Resource Gantt chart is divided into rows and columns. Each row represents a resource (resource or contractor), and each column represents a time period. Each scheduled task on the Resource Gantt chart appears as a task bar. When a scheduled task overlaps with another scheduled task, the task bars' heights are compressed, and the tasks are displayed one below the other within the same time period on the Resource Gantt chart.

The Resource List appears on the left side of the Resource Gantt chart, listing the resources to whom tasks can be scheduled by ClickSchedule. The tasks assigned to each resource are listed in the corresponding row in the Resource Gantt chart.

In addition, the Map view can be displayed on the right side of the Resource Gantt. For details on the Map view, refer to Monitoring Tasks and Resources on the Map.

From the Resource Gantt chart, you can review, modify, and unschedule current tasks. For details, refer to Chapter 3, Managing Tasks.

You can also add and delete resources, as well as add, modify and delete resource non-availability periods directly on the Resource Gantt chart. For details, refer to Chapter 4, Managing Resources.

For a detailed description of the Resource Gantt chart, refer to Viewing the Resource Gantt Chart.

## Job List

The Job List is a dynamic work area that displays information about all the tasks that have been transferred from the CRM/ERP system to ClickSchedule. The tasks displayed in the Job List are defined by the current scheduling calendar.

A variety of information can be displayed in the Job List. For example, you can display the Call ID, Region, Status, Start Date, and End Date.

Any changes made in the Job List are reflected on the Resource Gantt chart. In addition, any change in the task (for example, the status of a specific task changes from Open to Tentative) is automatically reflected in the Job List.

For a detailed description of the Job List, refer to Viewing the Job List.

## Resource Management View

Resource availability information is critical for scheduling. Although resource availability is usually managed in the organization's back office systems, you can manage some aspects of resource availability, such as resource calendars, in the Resource Management view.

To display the Resource Management view, click **Resource Management** at the bottom of the Navigation Panel.

The Resource Management view contains the Calendar Editor. The content of the Calendar Editor varies according to the active viewing mode:

- **Resource Mode:** Lists the resources for the loaded domain and the calendars assigned to them, and shows the calendars in a chart view. This mode is used for editing resource calendars.
- **Calendar Mode:** Lists the calendars for the loaded domain and the calendars and their base calendars, and shows the calendars in a chart view. This mode is used for editing base calendars.

For a detailed description of the Resource Management view, refer to Chapter 6, Managing Calendars.

## Crew Teaming View

ClickSchedule enables you to define a crew consisting of multiple resources who work together for a defined length of time. Having a crew makes it easier to schedule tasks requiring multiple skills, as each crew member may have a different skill set required by these tasks. For more about crews, refer to Managing Crews.

Each type of crew is configured to comprise a set number of resources. The Crew Teaming view enables you to view the level of coverage for each team and handle issues related to under and over-coverage. For details, refer to Managing Crew Coverage.

## Viewing ClickSchedule Data

ClickSchedule enables you to view data according to the currently defined - scheduling calendar. The domain consists of the specified time period and business. When you begin a new session, the ClickSchedule web client opens to the domain in which you worked in your previous session.

Task and resource data are loaded according to the selected business structure entity and the specified time frame. The business structure entities (regions, districts, and so on) are listed in the Business Structure tree.

### ***To load data for a business entity:***

The data to be loaded in the domain is determined by selecting the relevant entity at the lowest level of the Business Structure tree. For example, if the Business Structure tree shows the London and Washington regions, you can choose to view a specific district of London or a specific district in a different region.

1. If more than one policy domain has been defined for your organization, select the required domain from the dropdown list on the toolbar.
2. In the Scheduling Calendar Panel, set the **From** and **To** dates for the period for which you want to display or edit data. For details, refer to Selecting Dates from the Calendar.
3. Drill down within in the Business Structure tree and select the required business entity.

The corresponding checkbox is shaded in blue, and the data for the selected district (contained within the current time period) is displayed in the Resource Gantt Chart and Job List.

**Note:** You must select a node at the lowest geographical/organizational resolution.

The Resource Gantt chart and the Job List are refreshed according to the specified domain criteria.

**Note:** You can select multiple business entities. The resulting data is combined and sorted according to the current sort criteria.

## Filtering ClickSchedule Data

You can filter the Job List, Resource Gantt chart to display only those tasks that meet specific criteria. For example, you may want to view only those tasks that are in jeopardy or which have not yet been scheduled.

You can filter the Calendar Editor to display only those resources or calendars that meet specific criteria.

The criteria used to define the filter can be saved and reapplied at any time, eliminating the need to repeatedly define frequently used filter criteria.

You can create and delete filters from the Job List, Resource Gantt chart, or Calendar Editor, or in the Filter Manager.


**Notes:** The ability to save filters may be restricted based on the user authorization levels defined for your organization.

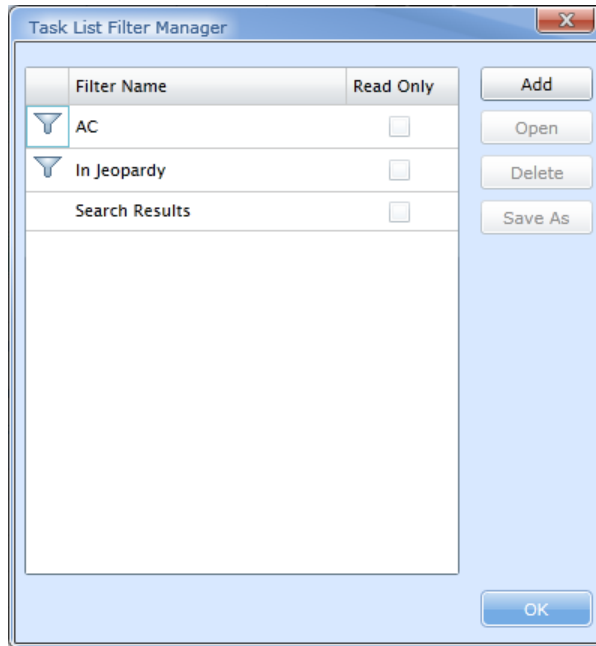
You cannot filter according to any object key. If you need to locate an object according, perform a search instead.


## Working with the Filter Manager

You can create, duplicate, edit, and delete filters in the Filter Manager. You can also designate a filter as read-only.

### ***To open the Filter Manager:***

1. Right-click the **Filter** button  in the Job List/Resource Gantt/Calendar Editor header and select **Filter Manager** from the popup menu. The respective Filter Manager dialog box is displayed.



The Filter Manager lists the existing saved filters. If the filter is currently applied the Filter icon  appears next to the filter name.

From the Filter Manager, you can:

- Designate a filter as read-only, by selecting the **Read Only** checkbox in the corresponding row.
- Click **Add** to define a new filter, as described in Defining and Applying Filters.
- Click **Save As** to create a filter based on an existing filter, as described in Duplicating a Filter .
- Select a filter and click **Delete** to delete it.

## Defining and Applying Filters

Although filters for the Job List, Resource Gantt Chart, and Calendar Editor are defined separately, the procedures for defining, saving, and applying filters are the same.


For the Job List, you can define filter criteria based on tasks (scheduled or unscheduled).

For the Resource Gantt chart, you can define filter criteria based on resources or on scheduled tasks.


For the Calendar Editor, you can define filter criteria based on resources or on calendars.

You can define filters from the Job List and Resource Gantt chart, as well as from the Filter Manager dialog box.

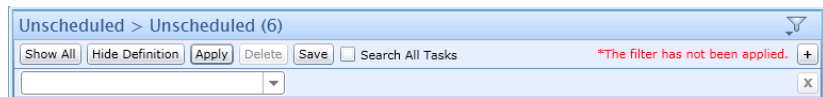
**To define and apply a filter from the Job List/Resource Gantt:**

1. Click the **Filter** button  in the Job List/Resource Gantt header to assign a filter,

Or

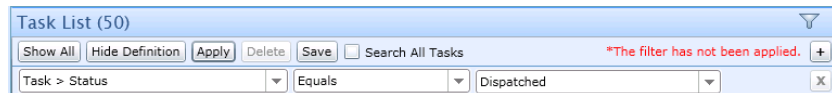
If one or more filters have already been defined, click the adjacent dropdown arrow  and select **Create New Filter** from the pop-up menu.


The Filter area appears immediately below the Job List/Resource Gantt header.




2. Define the filter criteria as follows:
  - From the first dropdown list, select the parameter according to which you want to filter the data.
  - From the middle dropdown list, select the condition that is to be met (Equals, Does not equal, and so on).
  - From the last dropdown list, select the search criteria to be matched.

The example below illustrates a filter that is used to display Tasks the status of which equals Dispatched.



3. (Optional) Click  to add an additional criterion that you want to include in the filter definition. An additional row is added to the filter area, enabling you to add another segment to the filter definition. An AND relationship is applied to the different filter segments.

**Note:** To remove a filter segment, click  in the corresponding row.

4. (Optional) To expand the search domain to include tasks from all of your organization's business entities in the filter results, select the **Search All Tasks** checkbox.

**Note:** The ability to view tasks for all business entities is subject to the configuration of filters for your organization.

5. Click **Apply** to apply the filter.

If you are applying a filter to the Job List, only those tasks which match the filter criteria are displayed in the Job List.

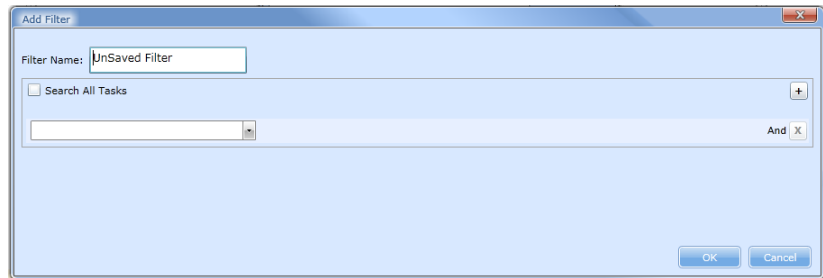
If you are applying a filter to the Resource Gantt chart:

- If one or more of the filter segments is defined to filter resources, only those resources which match the filter criteria are listed on the Resource List.
- If one or more of the filter segments is defined to filter tasks, the task bars for any tasks that do not match the filter criteria are grayed out on the Resource Gantt chart.

The number of tasks that meet the specified filter criteria is indicated in the Job List/Resource Gantt chart header).

***To define a filter from the Filter Manager:***


1. In the Job List/Resource Gantt/Calendar Editor Filter Manager dialog box, click **Add**. The Add filter dialog box is displayed.



2. In the **Filter Name** field, enter a meaningful name for the filter.
3. Define the filter criteria, as described in steps 2-4, above.
4. Click **OK** to save the filter definition. The filter name is added to the Job List/Resource Gantt/Calendar Editor context-sensitive pop-up menu as well as to the Filters list in the respective Filter Manager dialog box.

## Hiding/Displaying Filter Criteria

### **To hide the filter criteria:**

- Click the **Filter** button arrow  in the Job List/Resource Gantt/Calendar Editor header and select **Hide Filter** from the pop-up menu.

Or

In the Filter area, click **Hide Definition**.

The Filter area collapses and the filter definition is no longer visible.

### **To display the filter criteria:**

- Right-click in the Job List/Resource Gantt/Calendar Editor and select **Show Filter Definition** from the pop-up menu.

The Filter area expands and the filter definition is visible.

### **To display all tasks:**

- In the Filter area, click **All Tasks**.

## Saving Filters

Saving a filter eliminates the need to redefine commonly used criteria each time you access the ClickSchedule web client.

**Note:** The ability to save filters may be restricted based on the user authorization levels defined for your organization.

### **To save a filter:**

1. Define the filter criteria, as described in Defining and Applying Filters.
2. Click **Save** to save the filter criteria for future use. You are prompted to assign a name to the filter. The filter name is added to the Job List/Resource Gantt/Calendar Editor context-sensitive pop-up menu.

### **To apply an existing (saved) filter:**

- Right-click in the Job List/Resource Gantt/Calendar Editor and select the required filter definition from the pop-up menu.

## Duplicating a Filter

Duplicating a filter eliminates the need to define a filter from scratch that shares criteria with an existing filter.

**Note:** The ability to save filters may be restricted based on the user authorization levels defined for your organization.

### ***To duplicate a filter:***

1. In the Filter Manager dialog box, select the filter and click **Save As**. Save the filter with a new name. It is added to the list of filters.
2. Select the new filter and click **Open**.
3. Edit the filter criteria as required and click **OK**.

## Editing Filter Criteria

You can edit the definition of an existing filter.

**Note:** The ability to edit filters may be restricted based on the user authorization levels defined for your organization.

### ***To edit filter criteria:***

1. In the Filter Manager dialog box, select the filter and click **Open**.
2. Edit the filter criteria as required and click **OK**.

## Deleting a Saved Filter

### ***To delete an existing (saved) filter:***

- Right-click in the Job List/Resource Gantt/Calendar Editor and select the required filter definition from the pop-up menu. Then, in the Filter area, click **Delete** to delete the filter.

OR

Select the filter in the Filter Manager dialog box and click **Delete**.


**Note:** The ability to delete filters may be restricted based on the user authorization levels defined for your organization.

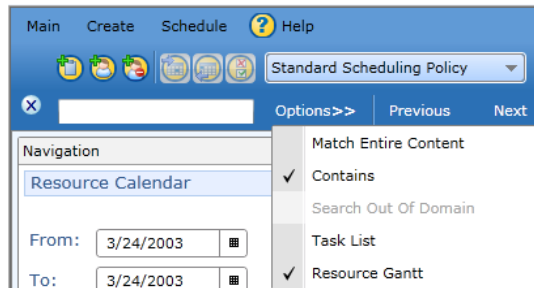
## Performing a Search

You can search for any of the standard ClickSchedule entities (resources, tasks, assignments, and more) at any time.

You can search the entire system or you can search a specific view.

### **To perform a search:**

1. Click the **Search** icon  on the toolbar. A search area appears below the menu bar.



2. Click **Options** and specify the search options:
  - Set the entities to be searched by selecting **Job List** or **Resource Gantt**.
  - Select **Contains** to locate all instances that contain the string or select **Match Entire Content** to locate only those instances that match the entire phrase/word.
3. Enter a name, term, or partial string in the search field. The number of matching results is listed.
4. Click the number of results link to display a list of the matching results.
5. Click a search result to view the additional details.

---

## CHAPTER 3

# Managing Tasks

ClickSchedule provides functionality that enables you to handle all aspects of task management. These activities include:

- **Creating a New Task**
- **Duplicating a Task**
- **Deleting Tasks**
- **Viewing and Editing Task Details**
- **Changing the Task Status**
- **Viewing the Job List**
- **Saving the Job List**
- **Printing the Job List**

## Overview

Typically, most tasks are created in the CRM/ERP system and then transferred into ClickSchedule. The tasks are then scheduled by ClickSchedule's offline automatic scheduling service according to predefined business rules and objectives – this routine scheduling process requires no human intervention.

If a task cannot be scheduled automatically by the Automatic Scheduling service, or you need to manage exceptions, you can schedule the task in the ClickSchedule web client:

- [Semi-automatically](#), by manually running the automatic scheduling service for selected tasks
- [Manually](#), by dragging and dropping a task onto an available timeslot on the Resource Gantt chart or based on [Candidate Suitability](#)

ClickSchedule enables you to view, update and delete tasks. You can also unschedule or re-schedule tasks.

In addition, to enable immediate scheduling of a task, you can create tasks using the ClickSchedule web client.

## Creating a New Task

New tasks are typically created in the CRM/ERP system and then transferred into ClickSchedule. In order to enable the handling of scheduling exceptions in real-time, you can create tasks using the ClickSchedule web client. The new task is automatically added to the Job List and can be modified and scheduled as required.

**Note:** The ability to create tasks using the ClickSchedule web client depends on the integration settings for your organization.

### ***To create a new task from the ClickSchedule web client:***

1. On the toolbar, click the **Create New Task** button ,

Or

Right-click in the Resource Gantt chart or the Job List, and select **Create New Task** from the popup menu.

Or

Select **Create New Task** from the Workload Management menu.

The New Task Form is displayed.

The image shows a 'New Task Form' dialog box with a sidebar on the left containing tabs for 'General', 'Time', 'Customer', 'Location', 'Resources', and 'Requirements'. The 'General' tab is active. The main area contains the following fields:

- \* CallID : [Text Input]
- \* Number : [Text Input]
- \* Priority : [Text Input]
- \* Status : [Dropdown Menu]
- Calendar : [Dropdown Menu (None)]
- Task Type : [Dropdown Menu (None)]
- \* Duration (HHH:MM) : [Text Input (00:00)]
- Pinned : [Checkbox]
- In Jeopardy : [Checkbox]
- Jeopardy State : [Dropdown Menu (None)]

Buttons for 'OK' and 'Cancel' are located at the bottom right of the dialog.

2. Define the necessary parameters on each of the pages, using the common task term descriptions provided in Task and Resource Terms on page 4. Mandatory parameters are indicated by a red asterisk.


**Note:** The parameters in the pages of the ClickSchedule New Task Form are subject to customization by your system administrator.


**Note:** Invalid values are not saved in the task form. If the numeric value entered in a field is not within the predefined range of property values, the field is automatically cleared.

3. (Optional) In the Resources page of the New Task Form, you can indicate any specific requests/requirements regarding the resource that is to be assigned to the task.

The screenshot shows the 'New Task Form' dialog box with the 'Resources' tab selected. The 'Required Resources' panel contains a list of resources with checkboxes: Andy James, Contractor 1, Contractor 2, James Clifton, Janet Jones, and Jim Matthews. The 'Preferred Resources' panel contains the same list of resources with checkboxes. The 'Resource Type' dropdown is set to '[None]'. The 'OK' and 'Cancel' buttons are at the bottom right.

The required resources should be defined in the Required Resources Panel. The customer's preferences for one or more specific resources can be specified in the Preferred Resources Panel.

- To add a resource, click **Show All**  in the respective Panel. The resources are listed in the Panel.
- To select a resource, select its checkbox.
- To remove a resource, clear its checkbox.

**Note:** To display only the selected resource(s), click **Hide Unselected** .

4. Click **OK**. The new task appears in the Job List and can now be scheduled.

## Duplicating a Task

ClickSchedule enables you to create a task as a copy of another task, based on that task's properties. Numerous tasks that differ marginally from existing tasks can then be created quickly and easily.

**Note:** When you copy a task, you must change at least the task's number. You can change other task properties as required.

### ***To duplicate a task:***

1. Right-click the task you want to copy in the Job List or Resource Gantt chart, and select **Duplicate Task** from the popup menu. Alternatively, select **Duplicate Task** from the Workload Management menu.

The Task Form for the selected task is displayed.

2. Edit the parameters on each of the pages as required, using the common task term descriptions provided in Task and Resource Terms on page 4.

**Note:** The parameters in the pages of the ClickSchedule New Task Form are subject to customization by your system administrator.

3. Click **OK**. The new task appears in the Job List and can now be scheduled.

## Deleting Tasks

ClickSchedule enables you to easily delete tasks.

**Note:** The ability to delete tasks may be restricted based on the user authorization levels defined for your organization.

### ***To delete tasks:***

1. Select one or more tasks in the Job List or Resource Gantt chart and then right-click and select **Delete Task** from the popup menu. Alternatively, select **Delete Task** from the Workload Management menu.
2. You are prompted to confirm that you want to delete the task(s). Click **Yes** to continue.

The selected tasks are automatically deleted from the Job List and Resource Gantt chart.

## Viewing and Editing Task Details

ClickSchedule enables you to view and edit a selected task's information. In this way you can accommodate any changes that occur by simply changing data for the tasks. You can change parameters such as general topics and location information; these changes are automatically updated on your screen, where relevant.

### **To view or edit task details:**

1. Double-click the task that you want to view or edit, or right-click the task and select **Edit Task** from the popup menu. Alternatively, select **Edit Task** from the Workload Management menu.

The ClickSchedule Task Form is displayed.

The screenshot shows a window titled "ClickSchedule Task Form (AC14 - 1)". The window has a sidebar on the left with tabs for "General", "Time", "Customer", "Location", "Resources", and "Requirements". The "General" tab is selected. The main area contains the following fields:

- \* CallID : AC14
- \* Number : 1
- \* Priority : 7
- \* Status : New (dropdown)
- Calendar : [None] (dropdown)
- Task Type : Air Conditions (dropdown)
- \* Duration (HHH:MM) : 00:15
- Pinned :
- In Jeopardy :
- Jeopardy State : [None] (dropdown)

At the bottom right of the window are "OK" and "Cancel" buttons.

The CallID and task number of the selected task appear in the title bar.

2. Use the parameter descriptions provided in the Task and Resource Terms section in Chapter 1 to assist you in editing the scheduling information for the task.

- Click **OK**. The changes you made are reflected in the Job List and the Resource Gantt chart.

**Note:** The ClickSchedule Task Form may provide different functionality if it has been customized by your system administrator.

## Changing the Task Status

You can change the status of a task in the ClickSchedule web client without opening the ClickSchedule Task Form.

ClickSchedule's smart status configuration limits the statuses available for selection based on your organization's predefined task life.



### **To change the task status:**


- Right-click the task in the Job List and select **Change Status** from the popup menu. Alternatively, select **Update Status** from the Execute menu.
- Select the required status from the **Change Status** sub-menu. The status of the task is updated accordingly.

**Note:** The available statuses are limited by the workflows configured for your organization.

## Viewing the Job List

An icon is displayed at the left of each task record in the Job List, indicating its

status:  **Scheduled** or  **Not Scheduled**. The currently selected (active) area of the Job List is highlighted.

Sche	Call ID	#	Priority	Type	Status	Duration	Start	Finish
	CL111_2	1	9	Rebuilding	Scheduled	0:45	1/7/2009 9:53 AM	1/7/2009 10:38
	CO0540_2	1	7	Power Tools	Open	1:30		
	LI0920_2	1	4	Rebuilding	Open	1:15		
	EL065_2	1	7	Power Tools	Open	1:15		
	AC0948_2	1	7	Cooling	On-Site	1:30	1/7/2009 9:16 AM	1/7/2009 10:46
	CL0913_2	1	7	Rebuilding	On-Site	0:30	1/7/2009 9:59 AM	1/7/2009 10:29
	EL0249_2	1	7	Laundry	Dispatched	1:30	1/7/2009 10:11 AM	1/7/2009 11:41
	EL0517_2	1	7	Rebuilding	Dispatched	1:30	1/7/2009 11:45 AM	1/7/2009 1:15 PM
	CO0615_2	1	5	Rebuilding	Dispatched	0:45	1/7/2009 9:15 AM	1/7/2009 10:00
	CO0233_2	1	7	Refrigeration	Accepted	0:45	1/7/2009 9:44 AM	1/7/2009 10:29
	CO0418_2	1	7	Rebuilding	Accepted	0:45	1/7/2009 9:26 AM	1/7/2009 10:11
	AC013_2	1	8	Power Tools	Accepted	1:15	1/7/2009 10:35 AM	1/7/2009 11:50

Task List   In Jeopardy   Unscheduled

Any changes made in the Job List are reflected on the Resource Gantt chart. In addition, any change in the task (for example, the status of a specific task changes from Open to Tentative) is reflected automatically in the Job List.

**Tip:** A legend of the icons and colors in the Job List can be displayed in the Legend Panel.

If the number of tasks is greater than can fit on the page, the Window's scroll bar appears on the right hand side, enabling you to scroll down to view additional list entries.

The total number of tasks is indicated in the Resource Gantt chart header. (If a filter is applied, the number of tasks that meet the specified filter criteria is indicated in the header).

## Sorting the Job List

You can sort the Job List by a specific parameter. For example, you can sort the Job List by Status or by Priority.

### **To sort the Job List:**

Click the task field column title whose order you want to sort. The Job List is sorted in descending order, according to the selected property. For example, if you want to sort the Job List according to Priority, click the Priority column header.

The current sort order is indicated by an arrow next to the column header, as shown below:



**Tip:** Click the column header again to reverse the sort order (ascending or descending).

## Working with Multiple Job List Tabs

By default, your Job List information is displayed in the main Job List tab. Optionally, you can work with multiple Job List tabs, with each tab focusing on a specific cross-section of your organization's workload. For example, this can be useful for monitoring tasks according to jeopardy state, status and/or priority.

**Notes:** Depending on your system configuration, additional predefined Task Lists tabs may already appear.

The ability to define additional tabs, as well as how many tabs you can add, is configured by your system administrator.

**To add a tab:**

1. Right-click the **Job List** tab and select **Add** from the popup menu or click the **Add** tab. The Job List is displayed in a new tab.



2. Right-click the new tab and select **Rename** to assign it a meaningful label.
3. Filter the Job List in the new tab to display a specific set of tasks (for example, tasks in jeopardy). For details, see Defining and Applying Filters.

**Note:** When you view a Job List tab, if you have defined a filter within the tab, the data it contains is automatically filtered according to that filter.

**To remove a tab:**


- Right-click the tab to be removed and select **Delete**. The tab is removed from the Job List Panel.

## Saving the Job List


You can save the Job List, or selected task entries, as an HTML file.

**Tip:** After saving the HTML file, you can change the file format from HTML to another format (for example, PDF or XLS).

**To save the entire Job List:**

1. Right-click in the Job List and select **Save Task(s)** from the popup menu, or click the **Save Job List** button  on the toolbar. Alternatively, select **Save Job List** from the Workload Management menu.
2. In the Save As dialog box, name the file and set the location in which you want to save the file.
3. Click **OK**. The Job List is saved in the specified location.


**To save only selected Tasks:**

1. Select one or more tasks in the Job List.
2. Right-click and select **Save Task(s)** from the popup menu, or click the **Save Job List** button  on the toolbar. Alternatively, select **Save Job List** from the Workload Management menu.
3. In the Save As dialog box, name the file and set the location in which you want to save the file.
4. Click **OK**. The file containing the tasks selected in the Job List is saved in the specified location.


## Printing the Job List

You can print the Job List, or selected task entries, at any given time.

### ***To print the entire Job List:***

1. Right-click in the Job List and select **Print Task(s)** from the popup menu, or click the **Print Job List** button  on the toolbar. Alternatively, select **Print Job List** from the Workload Management menu.
2. In the Print dialog box, set any required printing options and click **OK**.  
The Job List is sent to the printer.

### ***To print only selected Tasks:***

1. Select one or more tasks in the Job List.
2. Right-click and select **Print Task(s)** from the popup menu, or click the **Print Job List** button  on the toolbar. Alternatively, select **Save Task List** from the Workload Management menu.
3. In the Print dialog box, set any required printing options and click **OK**.  
The Job List is sent to the printer.

## CHAPTER 4

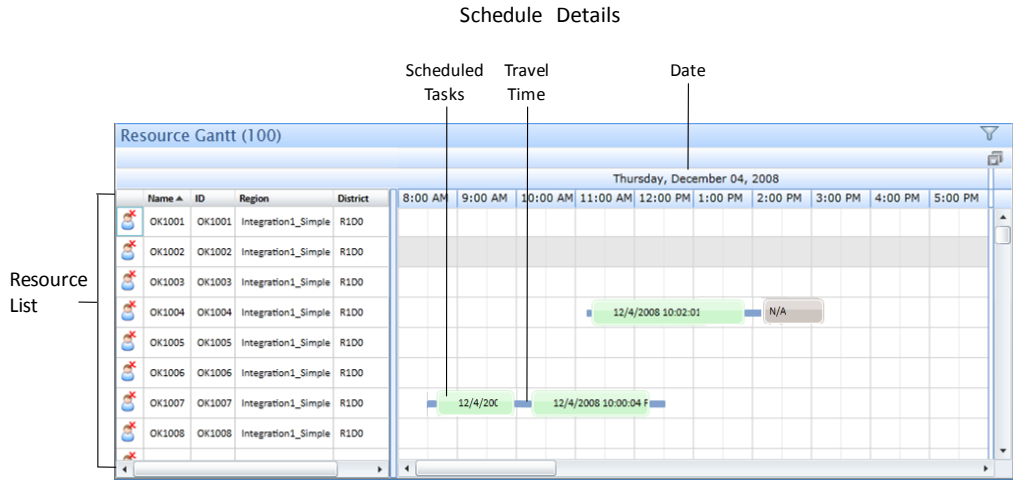
# Managing the Schedule

ClickSchedule provides functionality that enables you to handle the scheduling and monitoring of resources and tasks. These activities include:

- **Viewing the Resource Gantt Chart**
- **Selecting Tasks**
- **Scheduling Tasks**
- **Scheduling Policies**
- **Checking Rule Violations**
- **Unscheduling Tasks**
- **Focusing on Tasks**
- **Highlighting Corresponding Tasks**
- **Working with Multi-Stage Tasks and Task Dependencies**
- **Changing Task Schedule Details**
- **Monitoring Tasks and Resources on the Map**
- **Viewing and Handling Alerts**

## Viewing the Resource Gantt Chart


The Resource Gantt chart provides a graphic representation of the schedule details. Each scheduled task on the Resource Gantt chart appears as a task bar. In this way, you can clearly view the date and time that tasks are assigned to each resource. When a scheduled task overlaps with another scheduled task, the height of the task bars are compressed, and the tasks are displayed one below the other within the same time period on the Resource Gantt chart.



The total number of loaded resources is indicated in the Resource Gantt chart header. (If a filter is applied, the number of tasks that meet the specified filter criteria is indicated in the header).

A green online indicator is displayed next to the names of the resources for which real-time mobile connectivity is currently available.

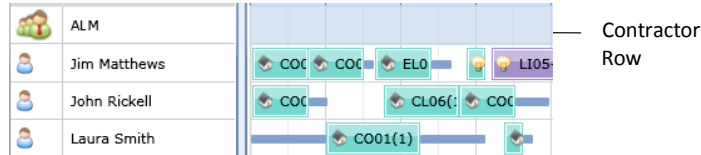
The Resource List appears on the left side of the Resource Gantt Chart, listing the resources to whom tasks can be scheduled by ClickSchedule. The tasks assigned to each resource are listed in the corresponding row in the Resource Gantt chart. The resources contained in this list are defined in the CRM/ERP system and/or the ClickSchedule Windows client.

If the resource is a crew, the  icon appears in the left column. For details on working with crews, refer to Chapter 6, Managing Crews.

**Note:** The specific columns included in the Resource List vary according to your organization's specific configuration.

When you hold your cursor over a task that is part of a multi-stage task (MST), the related tasks are highlighted on the Resource Gantt Chart.

If a resource is a contractor, the contractor appears on the Resource Gantt Chart as a gray row, as shown below:



**Note:** If the contractor is an individual resource, the ClickSchedule dispatcher typically handles its schedule and the resource name appears in the schedule accordingly.

You can easily navigate the Resource Gantt chart using the horizontal and/or vertical scroll bars.

The current time is indicated on the Resource Gantt chart by a vertical line. The position of the line adjusts automatically according to the time zone of the selected business entity.

You can filter the Resource Gantt chart to display scheduled tasks and non-availability periods based on various criteria. For details, refer to [Filtering ClickSchedule Data](#) on page 21.

From the Resource Gantt chart, you can review, modify, and unschedule current tasks. For details, refer to [Chapter 3, Handling Tasks](#).

You can also add and delete resources, as well as add, modify and delete resource non-availability periods directly on the Resource Gantt chart. For details, refer to [Chapter 4, Handling Resources](#).

**Tip:** You can select multiple tasks in the Resource Gantt chart using standard Windows multiple selection techniques (Ctrl and Shift keys). Once selected, you can perform actions on all the selected tasks simultaneously, including scheduling, unscheduling and deleting.

Any changes made to the Resource Gantt chart are immediately reflected in the Job List.

**Tip:** A legend of the icons and colors in the Resource Gantt Chart is displayed in the Legend Panel.

## Resource List Viewing Modes

The Resource List can be displayed in the following modes:

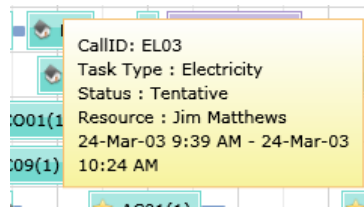
- **All Resources Mode:** Lists all of the resources for the loaded unit in the business structure.
- **Crews Mode:** Lists only crews and those resources not yet allocated to crews.
- **Relocations Mode:** Lists only relocated resources.

To change from one Resource List viewing mode to another, right-click on the Resource List and select **All Resources Mode**, **Crews Mode**, or **Relocations Mode**, as required.

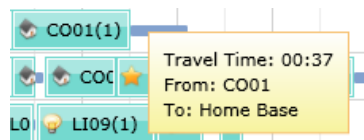
## Resource Gantt Chart Tooltips

The following tooltips are a convenient source of information when working with the web client's Resource Gantt chart.

- **Task Details:** When you hold your cursor over a task bar, a tooltip appears displaying information such as the Call ID, task type, and date and scheduled time. The information that is displayed in the tooltip can be customized to suit your specific requirements.



- **Travel Time:** When you hold your cursor over a travel time bar between two tasks, a tooltip appears displaying the estimated time required for the resource to travel from one task to the next.



## Changing the Work Mode

The time intervals displayed in the Resource Gantt chart depend on the selected Work mode: **24x7** (all hours or all days) or **Work Week** (the standard range of working days and hours for your organization).

### To change the work mode:

- To change the Gantt display to include all hour and all days within the time period specified in the Time Definition Panel, right-click in the header of the Gantt chart and select **Change to 24x7 Mode** or select **Change to 24x7** from the View menu.
- To change the Gantt display to include only those hours and days within standard range of working days within the time period specified in the Time Definition Panel, right-click in the Resource Gantt chart and select **Change to Work Week Mode** or select **Change to Work Week mode** from the View menu.

**Note:** The work week is predefined for the organization by your system administrator.

## Selecting Tasks

ClickSchedule enables you to easily select tasks in order to perform various functions, such as scheduling and unscheduling tasks.

### To select a task:

- In the Resource Gantt chart or Job List, click on the task bar or the row of the task that you want to select. The task is highlighted, indicating that it is selected, as shown in the example below. You can select multiple tasks using standard Windows multiple selection techniques (Ctrl and Shift).

Selected Task

Sche	Call ID	#	Priority	Type	Status	Duration	Start	Finish	Assigned Resource	Region
<input type="checkbox"/>	AC01	1	8	Air Conditions	Open	1:15				South-East
<input checked="" type="checkbox"/>	AC02	1	5	Air Conditions	In Jeopardy	0:45	3/23/2003 5:00 PM	3/23/2003 5:45 PM	duplicate	South-East
<input checked="" type="checkbox"/>	AC03	1	5	Air Conditions	Tentative	1:00	1/10/2011 12:52 AM	1/10/2011 1:52 AM	222	South-East
<input checked="" type="checkbox"/>	AC04	1	7	Air Conditions	Tentative	0:15	12/26/2010 1:01 AM	12/26/2010 1:16 AM	James Clifton	South-East
<input checked="" type="checkbox"/>	AC05	1	8	Air Conditions	Tentative	1:15	12/28/2010 10:34 PM	12/28/2010 11:49 PM	Libura Smith	South-East
<input checked="" type="checkbox"/>	AC07	1	5	Air Conditions	Tentative	1:00	12/29/2010 10:38 PM	12/29/2010 11:38 PM	Tom Willhouse	South-East
<input checked="" type="checkbox"/>	AC08	1	7	Air Conditions	Tentative	1:30	12/28/2010 12:36 AM	12/28/2010 2:06 AM	Andy James	South-East
<input checked="" type="checkbox"/>	AC09	1	7	Air Conditions	Tentative	1:30	12/9/2010 3:45 AM	12/9/2010 5:15 AM	Andy James	South-East

**Note:** To make it easier to locate a specific task, you can filter the tasks displayed in the Resource Gantt chart or Job List. For details, see [Filtering ClickSchedule Data](#).

**Tip:** You can copy a Call ID to the clipboard by right-clicking the task in the Job List or the Resource Gantt Chart and selecting **Copy Call ID**. The Call ID can then be pasted as required, for example into an email message, using Ctrl+V.

## Scheduling Tasks

Although the majority of tasks are scheduled by ClickSchedule's offline automatic scheduling service, the automatic scheduling service may not be able to schedule a task if the scheduling options do not conform to the predefined rules of your organization. For example, if there is no resource with the required skills available to perform the task, the task will not be scheduled automatically.

If the task cannot be scheduled automatically by the automatic scheduling service, or if the automatic service has not yet been activated, you can schedule the task interactively in one of the following ways:

- By triggering the automatic scheduling service for selected tasks

**Note:** If the task was not scheduled by the automatic scheduling service due to a policy or resource availability problem, semi-automatic scheduling will not be able to schedule the task unless a different business policy is applied or the availability of suitable resources has changed.
- By manually scheduling a task, for example, by dragging and dropping a task onto an available timeslot on the Resource Gantt chart or assigning a task based on Candidate Suitability, availability, or proximity.

## Triggering the Scheduling Process

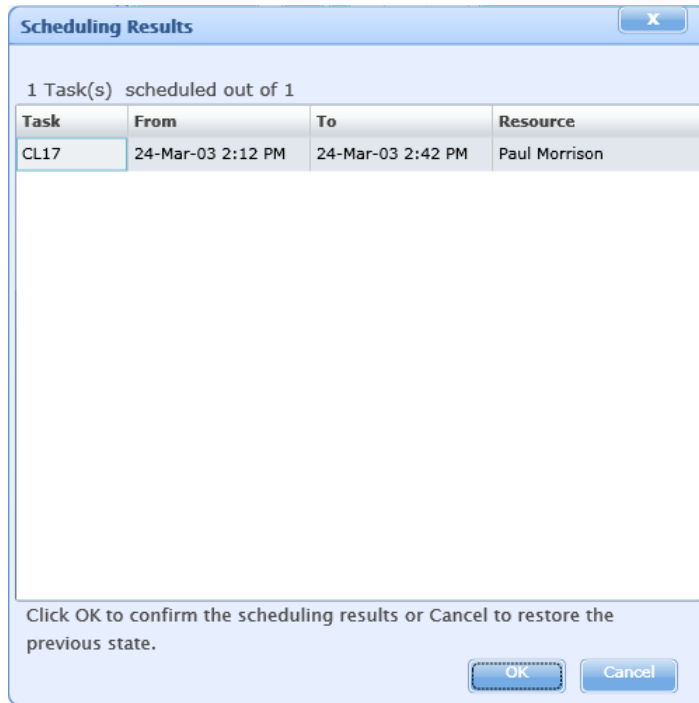
You can select a task in the Job List and instruct ClickSchedule to automatically select a resource and time interval in the schedule based on predefined business rules and objectives.

### ***To schedule a task from the Job List:***

1. Select one or more unscheduled tasks or scheduled tasks to be rescheduled, and do one of the following:
  - Right-click and select **Schedule** from the popup menu, or
  - Click the **Schedule Task(s)** button on the toolbar, or
  - Select **Schedule Task(s)** from the Schedule menu.

ClickSchedule automatically schedules the selected task(s) in an interval according to predefined rules, according to the task duration.

The Scheduling Results dialog is displayed.



2. Click **OK** to confirm and complete the scheduling process.

The newly scheduled task appears on the Resource Gantt chart.

The newly scheduled task information appears in the Job List. In addition, the status of the task (as well as other task properties) is updated automatically.

**Note:** If rule violations occur, the Rule Violations dialog box is displayed listing the rule violations. You are prompted to either continue with or cancel the scheduling.

## Manually Scheduling Tasks

You can manually schedule a task in any of the following ways:

- You can select a task and schedule it in an available interval in the roster, as described in Manually Scheduling a Task (Basic Drag & Drop).
- You can select the resource from a pool of qualified resources, and then drag the task to an available time interval, as described in Scheduling a Task Based on Candidate Suitability.

- You can identify those resources that have gaps in their schedules, and manually assign the task accordingly, as described in Scheduling Tasks to an Idle Resource.
- You can identify those resources located closest to the task location in the relevant time frame, and manually the task accordingly, as described in Identifying the Closest Resources to a Task.

## Manually Scheduling a Task (Basic Drag & Drop)

You can manually schedule unscheduled tasks by dragging and dropping them from the Job List onto the Resource Gantt chart as follows:

- Drag and drop a task from the Job List onto an available resource interval on the Resource Gantt chart to schedule the task to a specific resource on a specific date.
- Drag and drop a task from the Job List onto the date header on the Resource Gantt chart to schedule the task on a specific date to an unspecified available resource.
- Drag and drop a task from the Job List onto a resource name in the Resource List to schedule the task to a specific resource based on that resource's availability.

**Note:** Depending on your system configuration, the resources that have the necessary skill set may be highlighted on the Resource Gantt chart as soon as you begin to drag the task.

## Scheduling a Task Based on Candidate Suitability

You can identify the suitable candidates for a specific task at a specific time on the Resource Gantt Chart in the ClickSchedule web client, making it easier for you to effectively manage your schedule.

**Note:** The availability of the Get Candidate feature is configured by your system administrator.

### ***To identify and schedule a suitable candidate:***

1. Right-click an unscheduled task or a scheduled task to be rescheduled, and select **Get Candidate** from the popup menu. Alternatively, select the task and select **Get Candidate** from the View menu.

Resources that have the skills required for the selected task are highlighted on the Resource Gantt Chart.

2. Drag the task to an available interval for a suitable resource on the Resource Gantt chart.

ClickSchedule automatically schedules the selected task(s) in an interval according to predefined rules, according to the task duration.

The Scheduling Results dialog is displayed.

3. Click **OK** to confirm and complete the scheduling process.

The newly scheduled task appears on the Resource Gantt chart.

The newly scheduled task information appears in the Job List. In addition, the status of the task (as well as other task properties) is updated automatically.

**Note:** If rule violations occur, the Rule Violations dialog box is displayed listing the rule violations. You are prompted to either continue with or cancel the scheduling.

## Scheduling Tasks to an Idle Resource

You can improve the utilization of resource in your organization by identifying gaps in a resource's schedule and assigning tasks to those time intervals.

### ***To schedule an idle resource:***

1. On the Resource Gantt chart, right-click a resource with a scheduling gap and select **Schedule Idle Resource** from the popup menu. Alternatively, select the resource and select **Schedule Idle Resource** from the Schedule menu.

The Schedule Idle Resource wizard is displayed, listing the start and end times of the resource's scheduling gap.

Schedule Idle Resource

Schedule Task(s) to James Clifton:

From: 1/7/2009 10:00 AM

To: 1/7/2009 3:00 PM

Scheduling Considerations

high priority work

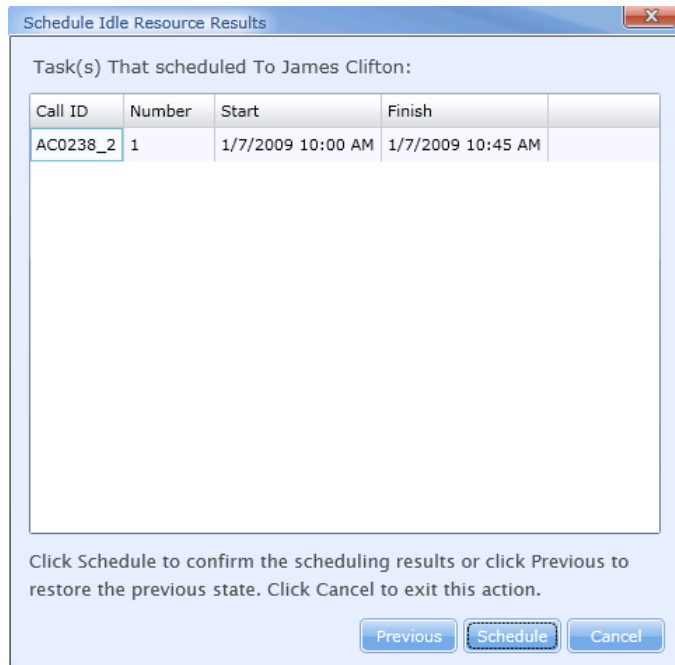
prefer to schedule high priority work to this available resource

Next Cancel

2. Edit the start and end times in the **From** and **To** fields, respectively.
3. (Optional) If a specific factor is to be taken into consideration in the scheduling process instead of the default factor shown, select it from the **Scheduling Considerations** dropdown list.

**Note:** The factors available for consideration (for example, priority) are defined during the configuration process in keeping with your organization's business logic.

4. Click **Next** to search for appropriate tasks for the selected candidate. The Schedule Idle Resource Results dialog box is displayed.



5. To schedule the tasks to the candidate, click **Schedule**.

The tasks are assigned to the candidate and appear in the Resource Gantt chart accordingly.

## Scheduling Policies

If more than one scheduling policy has been defined for your organization, you can select the scheduling policy to be applied to the schedule by selecting the policy from the dropdown list on the toolbar in the web client.

Standard Scheduling Policy ▾

When you select a policy, all the rules and objectives that have been predefined for the policy are applied to the schedule.

**Note:** The ClickSchedule Windows client enables you to specify which rules should be applied when scheduling a task interactively. For details, refer to the ClickSchedule User's Guide.


## Checking Rule Violations

ClickSchedule enables you to view and handle any rule violations that occur when you schedule a task interactively. Rule violations occur when ClickSchedule recognizes that a task schedule does not adhere to predefined scheduling rules. The Rule Violations dialog box is displayed on your screen, listing the rules that have been violated. You can either choose to ignore the rules and schedule the task anyway, or cancel the scheduling. Examples of rule violations include travel time conflicts and tasks that are not scheduled between their Early Start and Due Date.

**Note:** Rule violations do not occur when the Automatic Scheduling service schedules tasks.

ClickSchedule enables you to check the rule violations of scheduled tasks at any time.

### ***To check rule violations:***

- Select a scheduled task in the Job List or the Resource Gantt chart and click the **Check Rule Violations** button  on the toolbar,  
Or  
Right-click a scheduled task and select **Check Rule Violations** from the popup menu,  
Or  
Select **Check Rule Violations** from the Schedule menu.

If any scheduling rules have been violated, the Rule Violations dialog box is displayed, as in the example below.




If no rules have been violated, a popup message is displayed indicating that not rule violations were found.

## Unschedulering Tasks

ClickSchedule enables you to unscheduler tasks from the Job List or Resource Gantt chart. This helps you update the scheduler in response to changes in resource availability, customer requirements, or other unexpected changes.

**Note:** Unschedulering a task removes it from the scheduler but does not delete it from the Job List.

### ***To unscheduler tasks:***

- Select one or more scheduler tasks and click the **Unscheduler Task(s)** button  on the toolbar, or right-click the task and select **Unscheduler** from the popup menu. Alternatively, select the task and select **Unscheduler Task(s)** from the Scheduler menu.

ClickSchedule automatically unschedules the selected tasks and the following occurs:

- The scheduling information is removed from the Job List.
- The tasks are removed from the Resource Gantt chart.

## Focusing on Tasks

To make it easier to locate a specific task or category of tasks, you can filter the Job List or Resource Gantt chart to focus on specific types of tasks. For example, you may need to view and resolve issues related to tasks in jeopardy or unscheduled tasks.

Similarly, you may need to identify and re-assign any tasks assigned to a specific resource, for example, if the resource becomes unavailable for any reason. To this end, you can easily filter the Resource Gantt chart to display the tasks assigned to specific resources. For details on working with filters, see *Filtering ClickSchedule Data* on page 21.

In addition, you can work with multiple Job List tabs, with each tab focusing on a specific cross-section of your organization's workload. For details, refer to *Working with Multiple Job List Tabs*.

## Highlighting Corresponding Tasks

ClickSchedule enables you to locate a task in one view and highlight it in another view. For example:

- If you select a task bar on the Resource Gantt chart, you can locate and highlight this task on the Job List.
- If you select a task record in the Job List, or you can locate and highlight the corresponding task bar on the Resource Gantt chart.

### ***To highlight the corresponding task on the Resource Gantt chart or Job List:***

- To highlight the corresponding task on the Resource Gantt chart, right-click the task on the Job List and select **Show on Gantt** from the popup menu. Alternatively, select **Show on Gantt** from the View menu. The corresponding task is highlighted.
- To highlight the corresponding task on the Job List, right-click the task bar on the Resource Gantt chart and select **Show on Job List** from the popup menu. Alternatively, select **Show on Job List** from the View menu. The corresponding task is highlighted.

## Working with Multi-Stage Tasks and Task Dependencies

ClickSchedule enables you to manage multi-stage tasks. The stages of a multi-stage task are represented by separate tasks, all of which share the same CallID. You can specify time and resource dependencies between the tasks that comprise the multi-stage task. For example, you can specify that the second task be performed by the same resource that performed the first task, or you can specify that the second task can only be performed one day after the completion of the first task.

You can also specify the level of importance of the defined task dependencies as follows:

- You can specify that the task is critical, meaning that if this task is not scheduled, none of the other tasks of the multi-stage task can be scheduled.
- You can define a specific condition as a critical time dependency. Defining a critical time dependency specifies that the tasks cannot be scheduled without meeting the defined time dependency criteria. For example, if a Start-Start or Same-Day dependency relationship is defined between two tasks of a multi-stage task, both tasks must be scheduled or neither of the tasks can be scheduled. The dependency between the two tasks does not, however, impact on the scheduling of additional tasks belonging to the same multi-stage task. On the other hand, if a Finish-Start dependency is defined, either both tasks can be scheduled or only the first of the two tasks.

Task dependency details can be viewed in the Dependencies page of the Click Schedule Task Form.

### Viewing Multi-Stage Tasks

ClickSchedule enables you to identify the tasks that comprise a multi-stage task (MST) on the Resource Gantt chart and display their details together in a separate Job List tab.

If you hold your cursor over a task that is part of a multi-stage task (MST), the related tasks are highlighted on the Resource Gantt Chart.

#### ***To view the MST chain in a separate tab:***

- Right-click the task on the Resource Gantt chart or on the Job List and select **Show Task Dependencies** from the popup menu. Alternatively, select the task and then select **Show Task Dependencies** from the Workload Management menu.

A new Job List tab is added, listing the tasks that comprise the selected MST.

## Task Dependency Icons

The following icons are used to indicate the time dependency relationships:



Indicates that both tasks need to be scheduled on the same day.



Indicates that the first task must be completed before the second task can begin.



Indicates that the first task must be scheduled a specified length of time before the second task is scheduled.

The following icons are used to indicate Resource dependencies:



Indicates that both tasks **must** be performed by the same resource.



Indicates that both tasks **must not** be performed by the same resource.



Indicates that an effort should be made to schedule both tasks to the same resource.

## Defining Task Dependencies

### ***To define task dependencies:***

1. On the Resource Gantt or on the Job List, right-click the task whose dependencies you want to define and select **Edit**.

**Note:** You can also double-click the task on the Job List or on the map.

2. The Task form is displayed. Click **Dependencies** to display the Dependencies page.

Task Form (ju - 1)

Assignment

General

Time

Customer

Location

Resources

Requirements

Dependencies


Time Dependencies:


Call ID	#	Details	Critical	Description
---------	---	---------	----------	-------------

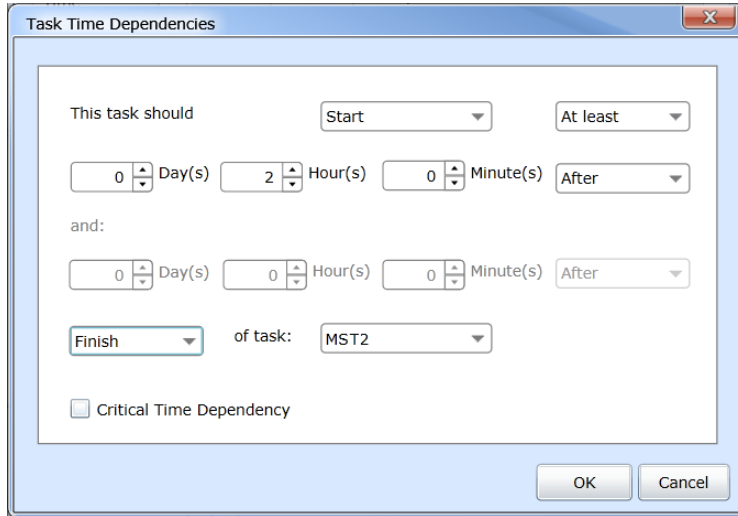
Resource Dependencies:

Call ID	#	Details	Description
---------	---	---------	-------------

Critical



3. In the Time Dependencies area, click **New** . The Task Time Dependencies dialog box is displayed.



Task Time Dependencies

This task should

Day(s)  Hour(s)  Minute(s)

and:


Day(s)  Hour(s)  Minute(s)

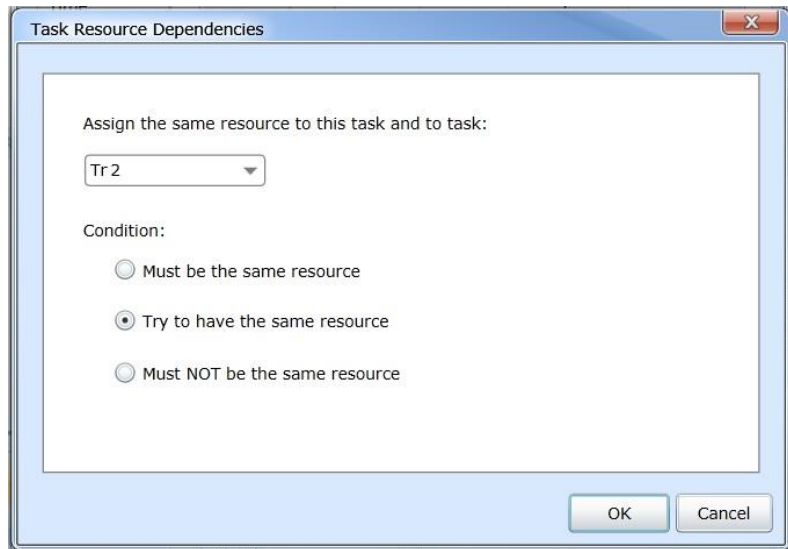
of task:

Critical Time Dependency

OK Cancel

4. From the dropdown lists, select the options that define the time dependency of the selected task. For example: This task should **Start At least 2** hours **After** the **Finish** of task **MST2**.
5. (Optional) Select the **Critical Time Dependency** checkbox to specify that the task cannot be scheduled without meeting the defined time dependency criteria. If the time dependency is defined as critical, then the tasks cannot be scheduled without meeting the conditions of the defined type of time dependency.
6. Click **OK** to save the time dependency and return to the Task Form. The time dependency is displayed in the Time Dependencies area.

7. In the Resource Dependencies area, click **New** . The Task Resource Dependencies dialog box is displayed:




8. From the **Assign the same resource to this task and to task** dropdown list, select the task on which this task is dependent.
9. Select one of the following scheduling conditions:
- Must be the same resource
  - Try to schedule the same resource
  - Must NOT be the same resource
10. Click **OK** to save the resource dependency and return to the Task Form. The resource dependency is displayed in the Resource Dependencies area.
11. Select the **Critical** checkbox to specify that the task is critical to the multi-stage task chain. If it cannot be scheduled, other tasks of the multi-stage task must not be scheduled.
12. Click **OK** to save the settings and return to ClickSchedule. The time and resource dependencies for the selected task can be viewed in the Dependencies Tab of the Job List. (For details, see Viewing Multi-Stage Tasks.)

## Editing Task Dependencies

ClickSchedule enables you to edit time or resource dependencies.


### **To edit a task dependency:**

1. On the Resource Gantt or on the Job List, right-click the task whose dependencies you want to define and select **Edit**.  
**Note:** You can also double-click the task on the Job List or on the map.
2. The Task form is displayed. Click **Dependencies** to display the Dependencies page.
3. Select the time or resource dependency that you want to edit and click **Edit** . The Task Time Dependencies or Task Resource Dependencies dialog box is displayed.
4. Edit the options as described in Defining Task Dependencies.

## Deleting Task Dependencies

You can delete time or resource dependencies.

### **To delete a task dependency:**

1. Select the task whose dependencies you want to delete.
2. From the Task menu, select **Edit the Selected Task**. The ClickSchedule Task Form is displayed.
3. Select the Dependencies tab, and select the time or resource dependency that you want to delete.
4. Click **Delete** . The selected time dependency or resource dependency is deleted.

## Changing Task Schedule Details

ClickSchedule enables you to change task schedule details due to changes that occur in the field on that day. For example, a resource may be delayed at a task, or a customer may call to postpone or cancel a scheduled task. Changing task schedule details can involve the following:

- Changing the scheduled time for a task
- Changing the scheduled resource for a task

### Changing the Scheduled Time for a Task

ClickSchedule enables you to change the time that a resource is scheduled to perform a task. This helps you quickly accommodate changes that can occur while a resource is in the field. For example, if the resource is delayed at one customer site, he or she will be delayed for his or her next scheduled task.

***To change a scheduled task time:***

1. From the Resource Gantt chart, choose the scheduled task that you want to change by selecting its task bar.
2. Drag and drop the task bar to the new task time interval in the same resource's row on the Resource Gantt chart. The task is placed in the location pointed to by the cursor.

If the rescheduled task conforms to the predefined scheduling rules, the task time is changed and the task bar appears in the new time period. The rescheduled task details are reflected in the Job List.

If rule violations occur, the Rule Violations dialog box is displayed. You can then choose to make the change anyway or cancel the scheduling.

### Changing the Resource Assigned to a Task

ClickSchedule enables you to change the resource assigned to perform a task from the Resource Gantt chart. This helps you quickly accommodate changes that can occur in a resource's schedule. For example, if a resource is delayed at one site, you can assign the resource's next task to a different resource.

***To change the resource assigned to a task:***

- On the Resource Gantt chart, drag and drop the task bar to the resource to which you are reassigning the task at an available time interval.

If the resource's reassignment to the task conforms to the predefined scheduling rules, the resource and task time are rescheduled accordingly. The task duration is recalculated according to the resource's efficiency. The task bar appears in the new resource's row on the Resource Gantt chart, and the reassigned task details are reflected in the Job List.


If rule violations occur, the Rule Violations dialog box is displayed. You can then choose to make the change anyway or cancel the scheduling.

## Monitoring Tasks and Resources on the Map

The Resource Gantt Panell includes the ClickSchedule Map view, which enables you to view the distribution of tasks on the map in real-time.



ClickSchedule can be integrated with any map provider. For example, the current version incorporates Bing maps.





**Tip:** For a larger view of the map, click .

The Map view displays scheduled tasks for a maximum of 24 hours (by default, the next 24 hours, starting from the current time).


**Note:** The time parameter that serves as the basis for loading the tasks is subject to configuration.

Icons are used to indicate the location of resources  and tasks  on the map. When you click a resource or task icon, the corresponding location details are displayed in a popup balloon on the map.

The connectivity status of a resource is indicated as follows:



- A green circle on the resource icon  indicates that the resource is connected via a mobile device.
- A red X on the resource icon  indicates that the resource is not connected.

**Notes:** If real-time location information is not available, the map locations are based on the scheduled tasks.

To adjust the map view to focus on a different point in time, click the  icon on the toolbar and move the indicator along the time line.

## Map Controls

The specific map controls vary depending on the map provider configured for your organization, however the following basic controls are typically available:

- To zoom in or out, move the marker along the vertical slider that appears in the Map view area or click the  and  buttons, respectively.
- To pan to different areas on the map, click the arrows on the directional tool

for example,  or  or .


- To display a standard road map view, click **Road** or **Map**.
- To display a satellite view of the area, click **Aerial** or **Satellite**.

For additional details on working with Bing maps, refer to <http://www.bing.com/maps/>. For additional details on working with Pitney Bowes or PTV maps, refer to the GIS guide.

## Changing the Selected Time Range

You can change the time period for which data is displayed on the map using the time interval slider.

### **To change the time interval:**

1. On the toolbar, click the **Time Interval Slider** icon , or select **Show Time Interval** from the Monitor menu. The time interval slider is displayed at the top of the Map view.
2. Slide the time indicator bar along the horizontal bar to select the required time period. The Map view is updated accordingly.

**Note:** To hide the time interval slider, click the **Time Interval Slider** icon again or select **Hide Time Interval** from the Monitor menu.

## Viewing Resource/Task Locations on the Map

### **To view the location of a resource:**

- Right-click the resource's name in the Resources list and select **Show on Map**. The location of the selected resource is centered on the map.


### **To view the location of a task:**

- Right-click the task in the Job List and select **Show on Map**, or select the task and select **Show on Map** from the View menu. The location of the selected task is centered on the map.



## Viewing Route Information

You can view the details of a specific resource's route (based on the schedule) or you request the route between two points on the map.

### ***To view a resource's route:***

- Right-click the resource's name in the Resources list and select **Show Route** or right-click the resource icon on the map and select **Get Resource Route for Day**. Alternatively, you can click the route icon  in the resource details popup on the map. The resources' route for the day is drawn on the map and the route directions appear in the Additional Panells area.

### ***To view the route between two points:***

1. Right-click on the map and select **Get A-B route** or select **Get A-B route** from the Monitor menu.
2. Click on the first point on the map. The label A  is added to the map.
3. Click on the second point on the map. The label B  is added to the map.
4. Right-click and select **Get A-B route** again. The route between points A and B is drawn on the map. The route directions appear in the Additional Panells area.

### ***To change the color of the route marking on the map:***

1. Right-click the route and select **Change Resource Route Color** or **Change A-B Route Color**, as applicable. Alternatively, select the route and select the applicable option from the Monitor menu.
2. In the dialog that is displayed, select the desired color and click **OK**. The route is displayed in the selected color.

### ***To remove the route marking from the map:***

- Right-click the route and select **Clear Resource Routes** or **Clear A-B Routes**, as applicable. Alternatively, select the route and then select **Clear Resource Route** from the Monitor menu. The route marking is removed from the map.

### ***To remove all route markings from the map:***

- Select **Clear All Routes** from the Monitor menu. All route markings are removed from the map.

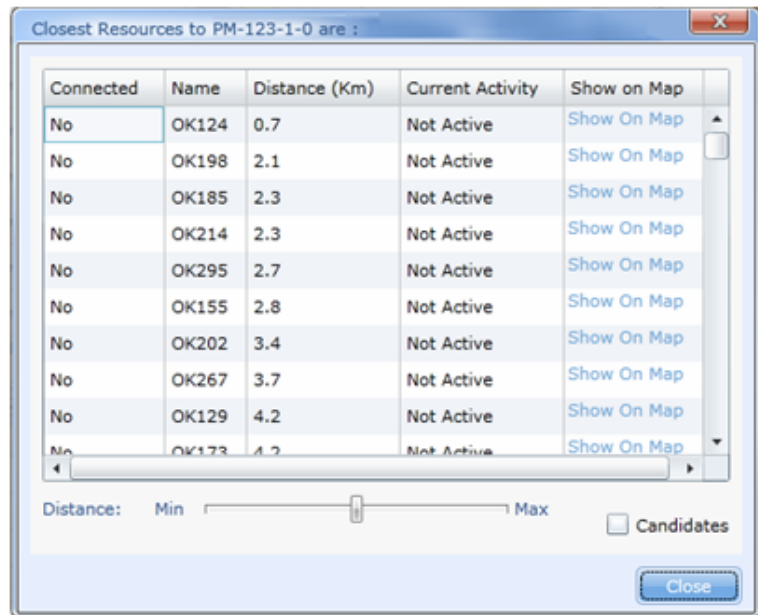
## Identifying the Closest Resources to a Task

You can take advantage of the Map view to identify the resources that are located closest to a specific task. This is particularly useful for handling urgent service requests.

### **To identify nearby resources:**

1. Right-click an unscheduled task or a scheduled task to be rescheduled, and select **Get Closest Resources** from the popup menu. Alternatively, select the task and then select **Get Closest Resources** from the Monitor menu.

The Closest Resources dialog box lists the resources found in close proximity to the task, including their distance from the task location and current assignment status.



2. Select the **Candidates** checkbox to display only those candidates who are suitable (based on your organization's business rules).
3. To assign a resource to the task, select the resource in the list and click **Assign**.
4. Click **Close**.

## Viewing and Handling Alerts

If configured for your organization, alerts can be displayed in the Alerts Panell.

To view the alerts list, click **Alerts** (under Additional Panells) to display the Alerts Panell. By default, the Alerts tab is displayed.

Status	Type	Due Date	Description
WW	BB		Arrived 1 hc

The Alerts tab includes the following details for each alert:

- **Status:** The current status of the alert.
- **Type:** The type of alert.
- **Due Date:** The date and time by which the alert issue needs to be handled.
- **Description:** A brief description of the alert.

**Notes:** The Alerts list displays alerts for a preconfigured time period only. It does not include alerts triggered prior to that time period.

The details included in the Alerts list are subject to configuration and may differ from those listed above.

From the Alerts Panell, you can:

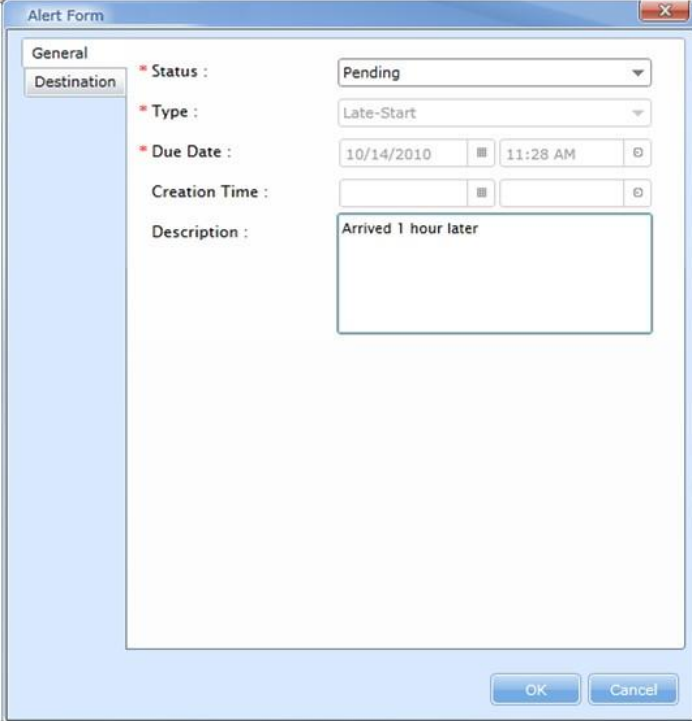
- View and edit the details of a specific alert, as described in [Viewing and Editing Alert Details](#) on page 63.
- View the task or assignment on the map or on the Job List, as described in [Viewing the Related Task or Assignment](#) on page 65.
- View the related resource on the map or Resource List, as described in [Viewing the Related Resource](#) on page 65.

## Viewing and Editing Alert Details

You can view the details of an alert, update its status, and define the dispatcher or group of dispatchers to which the alert is forwarded for handling.

### **To view/edit the details of an alert:**

1. In the Alerts Panel, double-click the alert or right-click the alert and select **Edit** from the popup menu. The General page of the Alert Form is displayed.



The screenshot shows the 'Alert Form' dialog box with the 'General' tab selected. The form contains the following fields:

- Status :** Pending (dropdown menu)
- Type :** Late-Start (dropdown menu)
- Due Date :** 10/14/2010 (calendar icon) 11:28 AM (clock icon)
- Creation Time :** (empty) (calendar icon) (empty) (clock icon)
- Description :** Arrived 1 hour later (text area)

At the bottom right of the dialog box are 'OK' and 'Cancel' buttons.

2. Edit the alert status and or description as required.



**Notes:** The available statuses are limited by the workflows configured for your organization.

- To view or edit the alert destination(s), click **Destination**. The Destination page of the Alert Form is displayed.

The screenshot shows the 'Alert Form' window with the 'Destination' tab active. The 'User Name' field is populated with 'CLICKSOFTWARE\gadi.ziv'. The 'Geographic Destinations' table is as follows:

Region	District
<input checked="" type="checkbox"/> South-East	Not Defined
<input checked="" type="checkbox"/> Texas	Not Defined

The alert destinations determine the specific dispatcher or group of dispatchers to which the alert is sent.

- To forward the alert to a specific person, enter that person's user name in the **User Name** field. (You can forward the alert to multiple persons by entering their usernames separated by commas.)
  - To forward the alert to the dispatcher(s) for one or more entities in the Business structure (region/district):
    - Click **Show All** . All available destinations are listed in the Panel.
    - To select a destination, select its checkbox.
    - To remove a destination, clear its checkbox.
- Note:** To display only the selected destination(s), click **Hide Unselected** .
- Click **OK**.

## Viewing the Related Task or Assignment

You can view the task or assignment to which an alert applies on the map or on the Job List.

***To view the task/assignment location on the map:***

- Right-click the alert and select **Show Alert Task on Map** or **Show Alert Resource on Map**, as applicable.

***To view the task/assignment on the Job List:***

- Right-click the alert and select **Show Alert Task on Job List** or **Show Alert Resource on Job List**, as applicable.

## Viewing the Related Resource

You can view the resource to which an alert applies on the map or on the Resource list.

***To view the resource location on the map:***

- Right-click the alert and select **Show Resource on Map**.

***To view the resource on the Resource List:***

- Right-click the alert and select **Show Resource on Resource List**.

## Viewing Notifications

Notifications are used to bring to your attention recently made changes to tasks, assignment and resources.

To view the Notifications list, click **Alerts** (under Additional Panells) to display the Alerts Panell and select the **Notifications** tab.

Alerts (11)		Notifications (35)	
Group By: Action			
Changed By	Object	Action	Received
Deleted (7 items)			
clicksoftware\chani.yagen		*	6/19/2011 11:29 AM
CLICKSOFTWARE\w6-qa		*	6/19/2011 11:22 AM
clicksoftware\chani.yagen		*	6/19/2011 11:28 AM
clicksoftware\chani.yagen		*	6/19/2011 11:30 AM
		*	6/19/2011 11:05 AM
		*	6/19/2011 11:05 AM
		*	6/19/2011 11:00 AM
Not Defined (15 items)			
clicksoftware\chani.yagen			6/19/2011 11:25 AM
clicksoftware\chani.yagen			6/19/2011 11:23 AM
clicksoftware\chani.yagen			6/19/2011 11:11 AM
clicksoftware\chani.yagen			6/19/2011 11:10 AM
clicksoftware\chani.yagen			6/19/2011 11:17 AM
clicksoftware\chani.yagen			6/19/2011 11:21 AM

The Notifications list displays the notifications that are assigned to you for the currently loaded business structure unit.

For easier viewing, notifications can be grouped by action, date received, date of change, and object type. In the example shown above, the alerts are grouped according to the type of action that triggered the notification.

To group the notifications by a specific criteria, select the criteria from the **Group By** dropdown list.

The number of instances appears in the group's header line. To collapse the group contents, click the ▲ icon. To expand a collapsed group, click the ▼ icon.

The Notification list typically includes some combination of the following details for each notification:

- **Action:** An icon indicating the type of action performed (add +, edit ✎, or delete ✖).
- **Object:** The type of object on which the action was performed.
- **Changed by:** The person who performed the action.
- **Changed on:** The date/time when the change was made.

- **Received:** The date/time when the notification was received.

**Note:** The details included in the Notifications list are subject to configuration and may differ from those listed above.

## Removing Notifications

You can remove one or more notifications from the list after you have determined that you no longer need to view them.

- To remove a single notification from the Notifications list, right-click the notification in the list and select **Clear > Current Notification**.
- To remove all notifications that are older than a selected notification, right-click the notification in the list and select **Clear > Previous Notification**.
- To remove all of the notifications select **Clear > All Notifications**.

**Note:** Clearing a notification removes it from the Alerts Panell only; it does not remove it from the system database.

## Viewing the Referenced Object on the Map or Job List

Depending on the type of referenced object, you can view the task, assignment or resource to which a notification alert applies on the map or on the Job List.

### ***To view the object on the map:***

- Right-click the notification and select **Show Notification Task on Map** or **Show Notification Resource on Map**, as applicable.

### ***To view the object on the Job List:***

- Right-click the notification and select **Show Notification Task on Job List** or **Show Notification Resource on Job List**, as applicable.

**Note:** If any of the above options is no applicable for the referenced object, the menu option is disabled accordingly.

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## CHAPTER 5

# Managing Resources

ClickSchedule provides the functionality that enables you to handle various aspects of your resources' schedules. These activities include:

- **Defining a New Resource**
- **Deleting a Resource**
- **Viewing and Editing Resource Properties**
- **Handling Resource Availability**
- **Monitoring Resource Locations**

## Overview

Tasks are scheduled to resources according to various considerations, such as availability and skills. The Automatic Scheduling service takes these properties into account when assigning tasks to resources according to business rules and objectives. These business rules and objectives are predefined by the system administrator.

Resources, and information concerning resources, can be entered into ClickSchedule and modified at any time. The resources are displayed in the Resource List in the Resource Gantt chart. Information displayed in the Resource List can be defined according to the property or properties of your choice.

## Contractors


ClickSchedule handles a contractor as a single unit, regardless of whether the contractor is an individual resource or an entire team of resources. When the service provider's dispatcher schedules a task to a Contractor, the dispatcher does not know which resource on the Contractor's staff will perform the task. For this reason, a Contractor appears as a gray line on the Resource Gantt. The Contractors are responsible for handling the details of their staff. In addition, The ClickSchedule web client enables an organization to provide remote access for contractors' dispatchers, enabling them to view their schedules and manage the assignment of specific tasks to the individuals on their staff

## Defining a New Resource

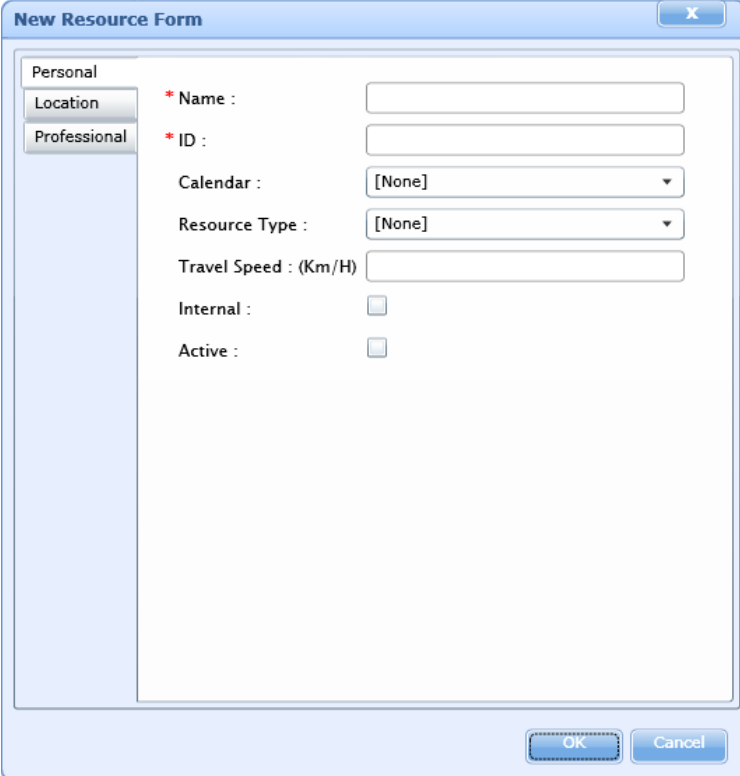
You can use the ClickSchedule web client to define a new resource. When a new resource is defined, it is immediately displayed in the Resource List.

**Note:** This functionality can usually be performed by an authorized resource or admin user only.

### **To define a new resource:**

1. Right-click anywhere in the Resource List, and select **New Resource** from the popup menu or click the **Create New Resource** button  on the toolbar.

The New Resource Form is displayed.



The screenshot shows a web-based form titled "New Resource Form". It features a sidebar with three tabs: "Personal", "Location", and "Professional". The "Personal" tab is currently active. The main area of the form contains several input fields and checkboxes. The fields are: "\* Name" (text input), "\* ID" (text input), "Calendar" (dropdown menu with "[None]" selected), "Resource Type" (dropdown menu with "[None]" selected), and "Travel Speed : (Km/H)" (text input). There are two checkboxes: "Internal" and "Active", both of which are currently unchecked. At the bottom right of the form, there are "OK" and "Cancel" buttons.

2. Define all of the parameters on each of the pages, using the common resource term descriptions provided in Task and Resource Terms on page 4. Mandatory parameters are indicated by a red asterisk.
3. Click **OK**. The new resource is displayed in the Resource List.

## Deleting a Resource

When a resource is deleted, it is immediately removed from the Resource List.

**Note:** This functionality can usually be performed by an authorized resource or admin user only.

***To delete a resource:***

- On the Resource List, right-click the resource you want to delete and select **Delete Resource** from the popup menu.

The resource is immediately removed from the Resource List.

**Note:** Before deleting a resource, ensure that the resource is not referenced by any other objects, for example, tasks.

## Viewing and Editing Resource Properties

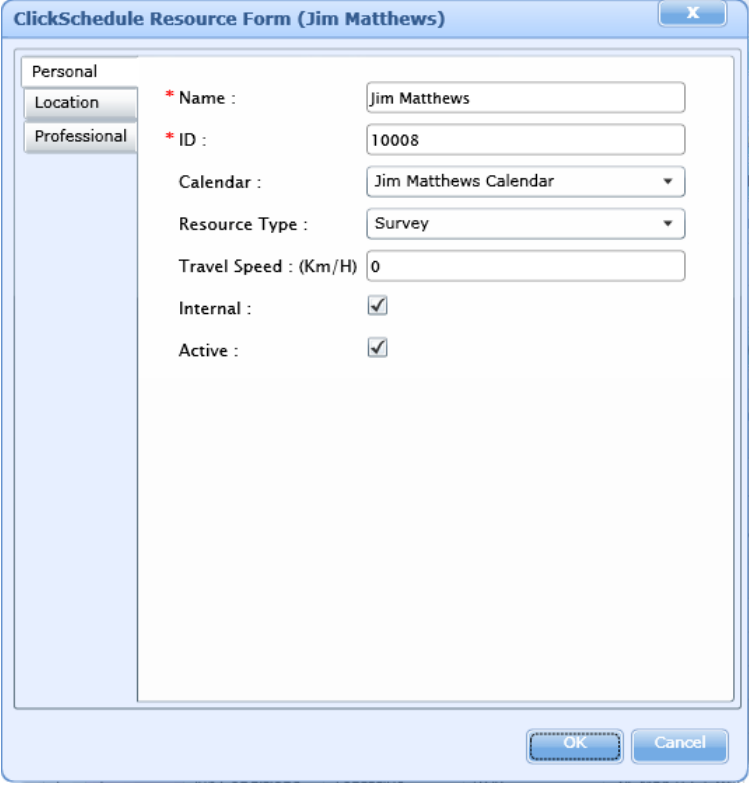
The ClickSchedule web client enables you to view the ClickSchedule Resource Form, and view and edit resource information including:

- Which resources belong to a particular region
- The particular skills of a resource
- The working calendar of a resource

**To view/edit the ClickSchedule Resource Form:**

1. Double-click on a resource's name in the Resource Gantt chart, or right-click on a resource in the Resource List and select **Edit Resource** from the popup menu.

The ClickSchedule Resource Form is displayed, containing information for the selected resource. The resource's name appears in the title bar.



The screenshot shows a window titled "ClickSchedule Resource Form (Jim Matthews)". On the left, there is a vertical sidebar with three tabs: "Personal", "Location", and "Professional". The "Personal" tab is selected. The main area contains the following fields:

- \* Name : Jim Matthews
- \* ID : 10008
- Calendar : Jim Matthews Calendar
- Resource Type : Survey
- Travel Speed : (Km/H) 0
- Internal :
- Active :

At the bottom right, there are "OK" and "Cancel" buttons.

2. Edit the parameters on each of the pages as required, using the common resource term descriptions provided in Task and Resource Terms on page 4.

**Note:** The ClickSchedule Resource Form may include different parameters if it has been customized by your system administrator.

## Handling Resource Availability

To facilitate the management of resource availability, ClickSchedule provides the following:

- Availability presentation on the Resource Gantt chart based on defined calendar
- Non-availability periods assigned per resource

A non-availability period is a designated time when a resource is not available to be scheduled for tasks. This may include vacation time, sick leave, jury duty, and so on. This feature enables you to meet the constantly changing needs of the resources in your organization.


Non-availability periods are indicated as bars on the Resource Gantt chart and are labeled as such. The specific properties displayed on the Resource Gantt chart for non-availability periods, such as the reason or a description, are subject to your organization's specific configuration.

### Adding Non-Availability Periods

ClickSchedule enables you to add, modify, and delete a non-availability period in a resource's work schedule directly from the Resource Gantt chart. A non-availability period is created for a one resource at a time.

**Note:** You can assign a non-availability period to a Contractor by selecting **Create N/A** from the Gantt menu and then selecting a resource. However, it is important to note that the overall Contractor capacity cannot be managed from the ClickSchedule web client; to update a Contractor's capacity, please contact your Administrator.

#### ***To add a resource non-availability period:***



1. Right-click an empty location in the Resource Gantt chart (not in the Resources List) and select **Create New Non Availability** from the popup menu, or click the **Create New N/A** button  on the toolbar. The New N/A Form is displayed.

Alternatively, hold down the Shift key and click the mouse to drag and select a time interval on the Roster. When you release the mouse button, the New N/A Form is displayed.

The screenshot shows a 'New N/A Form' dialog box with the following fields and values:

- General** tab selected.
- Start**: 12/23/2009, 12:52 PM
- Finish**: 12/23/2009, 12:52 PM
- Type**: [None]
- Resources** panel:

Name
<input checked="" type="checkbox"/> James Clifton
- Comment**: (Empty text box)
- Buttons**: OK, Cancel

- In the **Start** and **Finish** fields, set the dates by either entering the date in each of the designated fields or by clicking the adjacent **Calendar**  button and selecting the date from the calendar that is displayed. (For details, refer to Selecting Dates from the Calendar.) Set the times by either entering the time in the designated fields or by clicking the adjacent **Clock**  button and selecting the date from the options that are displayed.
- From the **Type** dropdown list, select the type of non-availability, if applicable.
- In the Resources Panel, select the resource for which the non-availability period is to be created as follows:
  - To add a resource, click **Show All**. The resources are listed in the Panel.
  - To select a resource, select its checkbox.

**Note:** You should create a non-availability period for only one resource at a time. To remove a resource, clear its checkbox.

5. In the **Comment** field, enter any information relevant to the non-availability period. For example, you may want to enter a description of the reason for the non-availability period, such as vacation or jury duty.
6. Click **OK**. A non-availability bar appears on the Resource Gantt chart for the selected resource in the location that you specified. If rule violations occur, the Rule Violations dialog box is displayed.

## Modifying Non-Availability Periods

You can modify the properties of a Non-Availability period in a variety of ways.

### ***To modify a non-availability period in the N/A Form:***

- Double-click the non-availability bar or right-click it and select **Edit** from the popup menu. The N/A Form is displayed.
- Edit the non-availability properties as required, as described in Adding Non-Availability on page 72.
- Click **OK**. (If rule violations occur, the Rule Violations dialog box is displayed.)

### ***To manually change the timing of a non-availability period:***

- Drag the entire Non-Availability bar to the desired location.

The changes you make are reflected by the size and position of the bar. (If rule violations occur, the Rule Violations dialog box is displayed.)

## Deleting Non-Availability Periods

You can delete a Non-Availability period from the Resource Gantt chart.

### ***To delete a non-availability period:***

- Right-click on the non-availability bar and select **Delete** from the popup menu.

The non-availability period is automatically deleted, and the Non-Availability bar disappears from the Resource Gantt chart.

## Relocating a Resource

In service organizations, undercapacity and overcapacity are common occurrences. The ClickSchedule web client facilitates more efficient handling of the distribution of resources by enabling you to temporarily assign resources from one location to another location. For example, you can float resources between the entities in your business structure to accommodate seasonal changes in demand or periodic maintenance tasks that require additional manpower. A

location or entity can be geographical or logical, for example, different departments within a service center.

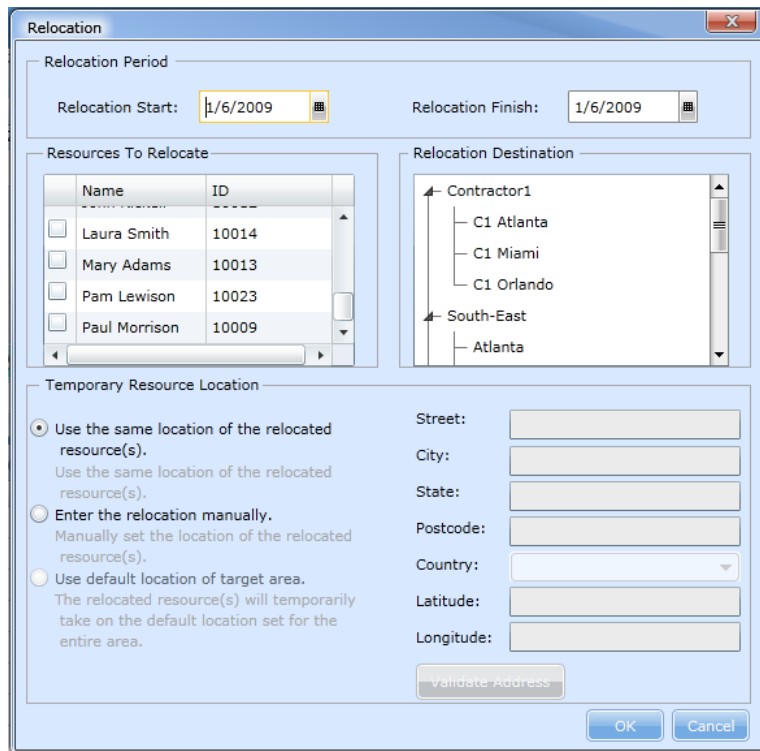
You can relocate specific resources or crews. When you relocate a crew, all of the resources allocated to the crew for the designated time period are relocated.


**Note:** If you add a resource to a crew during its relocation period, the new member is not added to the relocation.


**To relocate a resource:**

1. In the Resource Gantt Chart, select the resource(s) that you want to relocate and then right-click and select **Relocation**.

The Relocation window is displayed, with the resource(s) selected in the Gantt Chart automatically selected for relocation.



2. In the **Relocation Start** field, type the first date in the time period during which the resource is to be relocated, or click  and select the date from the graphic calendar.

3. In the **Relocation Finish** field, type the last date in the time period during which the resource is to be relocated, or click  and select the date from the graphic calendar.
4. In the Resources to Relocate Panel, verify that the resource(s) to be relocated are selected.
5. In the Relocation Destination Panel, select the location to which the resources are to be temporarily relocated in the hierarchical tree.
6. In the Temporary Resource Location Panel, specify the criteria to be used in determining the base location of the relocated personnel:
  - **Use the same location as the relocated resource(s):** Continues to use the default address of the resource(s) as the base location during the relocation.
  - **Enter the relocation address manually:** Enables you to manually enter the address details in the adjacent fields. After entering the address details, click **Validate Address** to check that the address is valid.
  - **Use the default location of the target area:** Uses the default address of the target location as the base location during the relocation period.
7. Click **OK**. The relocation is set for the specified period.

## Cancelling Resource Relocations

You can cancel all scheduled relocations for the selected resource.

### ***To cancel relocations:***

1. Right-click on the Resource List and select **Cancel All Relocations**. A confirmation message is displayed.

**Tip:** To view only the resources for which relocations have been defined, right-click on the Resource List and select **Relocations Mode**.
2. Click **OK** to remove the relocations.

## Monitoring Resource Locations

If your organization integrates connectivity with Geographical Information System (GIS) applications, you can monitor resource locations on a map in real-time. For details, refer to [Viewing Resource/Task Locations on the Map](#).

In addition, you can view the route information for a resource or the route between two locations on the map. For details, refer to [Viewing Route Information](#).

**Note:** If real-time location information is not available, the map locations are based on the scheduled tasks.

## CHAPTER 6

# Managing Crews

ClickSchedule enables you to define one or more crews, each consisting of multiple resources who work together for a defined length of time. You can then schedule tasks to all of the resources assigned to that crew in the Scheduling view.

This chapter includes the following topics:

- **Creating a Crew**
- **Allocating Resources to a Crew**
- **Viewing Crew Members**
- **Working in Crews Mode**
- **Managing Crew Coverage**

## Creating a Crew

You need to add a crew and specify its type before you can assign resources to it. Each type of crew is configured to comprise a set number of resources.

**Note:** The available crew types are subject to configuration.

### ***To add a crew:***

1. In Scheduling view, right-click anywhere on the Resources list in the Resource Gantt chart, and select **Create Crew** from the popup menu.

The New Resource Form dialog box is displayed.

The screenshot shows a 'New Resource Form' dialog box with a blue border and a close button (X) in the top right corner. On the left side, there is a vertical tab bar with three tabs: 'Personal' (selected), 'Location', and 'Professional'. The main area of the dialog contains the following fields:


- \* Name : [Text input field]
- \* ID : [Text input field]
- Calendar : [Dropdown menu with '[None]' selected]
- Resource Type : [Dropdown menu with '[None]' selected]
- Travel Speed : (Km/H) [Text input field]
- Internal :
- Active :

At the bottom right of the dialog, there are two buttons: 'OK' and 'Cancel'.

2. In the Personal tab, set the general parameters for the crew as follows:
    - **Name:** The name of the crew.
    - **ID:** A unique number assigned to the crew.
    - **Calendar:** The working calendar used by the team.
    - **Resource Type:** The type of crew.  
**Note:** The available crew types are subject to configuration.
    - **Travel Speed:** The speed at which the team travels between tasks.
    - **Active:** This option enables customization to define if the selected team is available for scheduling. If the checkbox is selected, the crew is active and available for scheduling.
    - **Internal:** If the checkbox is selected, the crew is an internal entity. If not selected, the crew is a subcontractor.
- Note:** The New Resource Form dialog box may provide different functionality if it has been customized by your system administrator.

3. In the Location tab, indicate the geographical location of the warehouse, office or service center that serves as the crew's home base, i.e., the location from which team begins its daily or weekly activity.

**Note:** When working with crews, it is recommended to work with time-phased skills. For this reason, when defining a crew, it is recommended that you not configure the professional settings in the Professional tab.

4. Click **OK**. The new crew is displayed on the Resources list with a special icon  indicating that it is a crew.

## Allocating Resources to a Crew

After creating a crew, you must allocate resources to work on that crew. A resource may belong to only one crew on a particular day. For example, if a resource named John Smith is assigned to work on Crew A on July 1<sup>st</sup>, he cannot be assigned to another crew on that day. He can, however, be assigned to a different crew on other days.

If the crew allocation is for less than an entire workday, individual resources can be also allocated to additional tasks outside the range of the hours defined for the crew in keeping with their individual availability.

All resources in a crew allocation must be located in the same district. You can allocate several resources at the same time, or you can allocate them one at a time.

**Note:** If the resource allocation to the crew is defined as critical, then the entire crew becomes unavailable for the duration of that resource's Non-Availability.

### ***To create a crew allocation:***

1. Right-click a resource name in the Resources' Gantt Chart and select **Create Crew Allocation** from the popup menu.

The Crew Allocation Form dialog box is displayed.

The screenshot shows the 'Crew Allocation Form' dialog box. It features a title bar with a close button. The main area contains the following elements:

- From:** Date: 12/26/2010, Time: 12:00 AM
- To:** Date: 12/26/2010, Time: 11:59 PM
- Periodic Allocation:**  (checked), Start Hour: 12:00 AM, End Hour: 11:59 PM
- Crew:** A dropdown menu showing 'A'
- Resource:** A list with checkboxes for '222', 'ABRAHAM VON BERK' (checked), 'AL MACHALA', and 'ALEX ANSELMO'
- Critical Allocation:**  (unchecked)
- Continue from home base:**  (unchecked)
- Buttons:** 'OK' and 'Cancel' at the bottom right.

2. Set the start and end dates and times for the crew allocation in the **From** and **To** fields.

**Note:** A resource cannot be allocated to a crew for a time period that exceeds four years.

3. To set multiple allocations in one operation, select the **Period Allocation** checkbox, and set the range of working hours in the **Start Hour** and **End Hour** fields. These hours are repeated for the date range defined in the **From** and **To** fields.

**Note:** The periodic allocation settings are applied to all of the resources selected in the **Resource** list, creating an allocation for each day for each of the selected resources.

4. From the **Crew** dropdown list, select the crew to which you want to allocate the resource(s).
5. In the **Resource** list, select the checkbox next to each resource to be included in the allocation.

6. To indicate that specified crew members must all be available in order for the crew to be deployed to a task, select the **Critical Allocation** checkbox.

**Note:** This option requires system customization. For details, contact Click Software.

7. To indicate that the team will begin its activities from the home base, select the **Continue from home base** checkbox.
8. Click **OK**. The new crew allocation is saved.

**Note:** If a task was previously assigned to a resource for a time period that overlaps with the crew allocation, then the task is automatically unscheduled.

## Adding a Resource to a Crew - Using Drag & Drop Functionality

You can also allocate a resource to an existing crew using the drag and drop method.

**Tip:** To view only the crews and those resources not yet allocated to a crew, right-click in the Resources List and select **Crews Mode**.

### ***To drag a resource into a crew:***

1. Select the resource in the Resource List and drag it onto the crew entry to allocate the Resource to the crew for the current day.

The Crew Allocation Form dialog box is displayed.

2. To set specific working hours for multiple (repetitive) allocations, select the **Period Allocation** checkbox, and set the range of working hours in the **Start Hour** and **End Hour** fields. The specified hours will be repeated for the date range defined in the **From** and **To** fields.
3. To indicate that the selected crew member must be available in order for the crew to be deployed to a task, select the **Critical Allocation** checkbox.
4. Click **OK**.

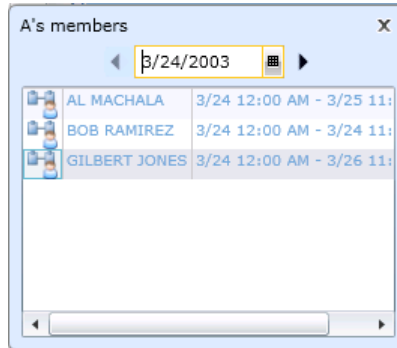
**Note:** If a task was previously assigned to a resource for a time period that overlaps with the crew allocation, then that task is automatically unscheduled.

## Viewing Crew Members



You can view the members of a crew and their allocation across the period covered by the Resource Gantt Chart. You can also view the crew members assigned on a specific date or to a specific task.

### **To view a crew's members:**

1. In the Resource List, right-click the crew name and select **Show Crew Members**. The respective Crew dialog box is displayed.



The resources allocated for the currently selected date are listed.

2. To view the crew resources for a different date, enter the date in the field at the top of the form or click the adjacent **Calendar**  button and select the date from the calendar that is displayed. (For details, refer to Selecting Dates from the Calendar.)
3. (Optional) Drill down to view any of the following details:
  - To view the properties of a specific crew member in the Resource dialog, click the  icon.
  - To view a specific crew member in the Resource List, click the member's name.
  - To view a specific crew member of the Resource Gantt, click time/date entry for that member.

### **To view all of a crew's members on the Resource Gantt:**

- Right-click the crew in the Resources List and select **Show Crew Members on Gantt**.

***To view all of a crew's members on the map:***

- Right-click the crew in the Resources List and select **Show Crew Members on Map**.

## Working in Crews Mode

When working the Scheduling View, you can filter the Resources List to include only crews and those resources not yet allocated to crews. This can be helpful for allocating resources to crews.

- To change to Crews Mode, right-click in the Resources List and select **Crews Mode**. Resources already allocated to crews are hidden.
- To return to Resources Mode, right-click in the Resources List and select **Resources Mode**. All of the loaded resources are listed (including crews).

## Managing Crew Coverage

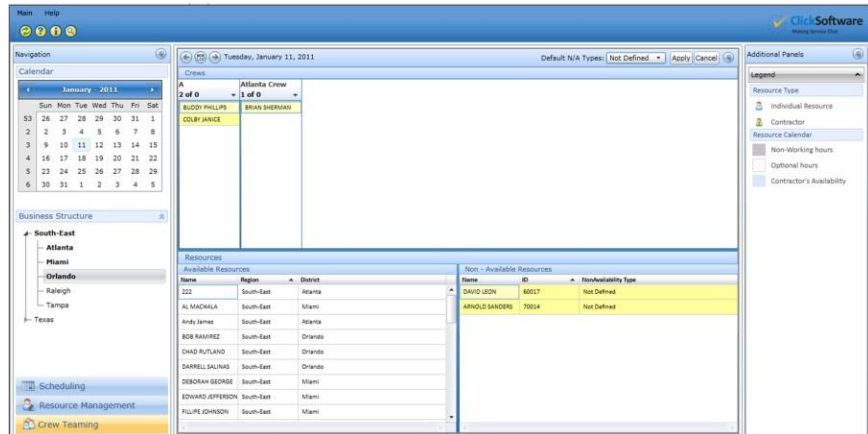
Each type of crew is configured to comprise a set number of resources. The Crews Teaming view enables you to view the level of coverage for each team within the loaded business entities for a specific time period.

ClickSchedule web client enables you to easily identify and resolve issues related to under and over-coverage.

**Note:** The available crew types and their predefined staffing requirements are subject to configuration.

## Viewing Crew Coverage

The Crews Teaming view is displayed when you select **Crews Teaming** in the Navigation Panel.






The date for which data is displayed appears at the top of the view, above the Crews Panel.

The Crews Teaming view comprises two main Panels:

- The **Crews** Panel includes a separate entry for each assigned on the selected date in the loaded organizational unit. Each crew entry appears in a separate column, with its name and coverage level as the column header. The coverage level indicates the number of allocated resources out of the maximum number of required team resources. For example, “2 of 5” indicates that two resources are assigned to the team out of a total of 5 resources configured for this team’s resource type. The resources allocated to the crew are listed below the column header. If a crew does not have the necessary staffing, the crew name appears in red.
- The **Resources** Panel includes two lists:
  - Available Resources
  - Non-Available Resources

You can perform the following actions in the Crews Teaming view:

- View team coverage for a different date by selecting the date for which you want to view crew information in the Calendar Panel. Alternatively, you can use the **Previous** , **Today** , or **Next**  buttons at the top of the view to change the selected date.
- Add a resource to a crew, as described in Adding a Resource to an Understaffed Crew

- Assign/remove resource non-availability, as described in Assigning Resource Non-Availability
- Remove a resource from a crew, as described in Removing a Resource from a Crew

## Adding a Resource to an Understaffed Crew

You can identify an understaffed crew and assign it the necessary resources in the Crew Teaming view.

### ***To add a resource to a crew:***

- Drag and drop the resource from the Available Resources list onto the crew entry in the Crews Panel.

## Assigning Resource Non-Availability

You can create non-availability for a resource in the Crew Teaming view.

### ***To create non-availability for a resource:***

1. From the **Default N/A Types** list at the top of the view, select type of non-availability you want to create for the resources
2. Drag and drop the resource from a Crew entry or from the Available Resources list onto the Non-Available Resources list. Non-availability is created for the resource for the entire day.

**Note:** To remove the resource's non-availability, you can drag and drop the resource from the Non-Available Resources list onto the Available Resources list. The resource is again available for allocation to a crew on the selected day. This option is available only for non-availabilities created in the same session.

## Removing a Resource from a Crew

You can remove a resource from a crew in the Crew Teaming view.

### ***To remove a resource from a crew:***

- Drag and drop the resource from the crew entry in the Crews Panel to the Available Resources list or the Non-Available Resources list, as applicable.

## CHAPTER 7

# Managing Calendars

Although resource availability is usually managed in the organization's back office, you can manage some aspects of base and resource calendars in the Resource Management view of the ClickSchedule web client.

This chapter includes the following topics:

- **Overview of Calendar Management**
- **Working with the Calendar Editor**

## Overview of Calendar Management

A calendar defines the working hours of your organization, the hours that a resource works, or the working hours of a customer.

Resource calendars reflect the planned availability of resource(s), meaning their general working hours. By contrast, Non-Availability periods indicate times when a resource is not available to be scheduled for tasks – exceptions to the resource's general working hours.

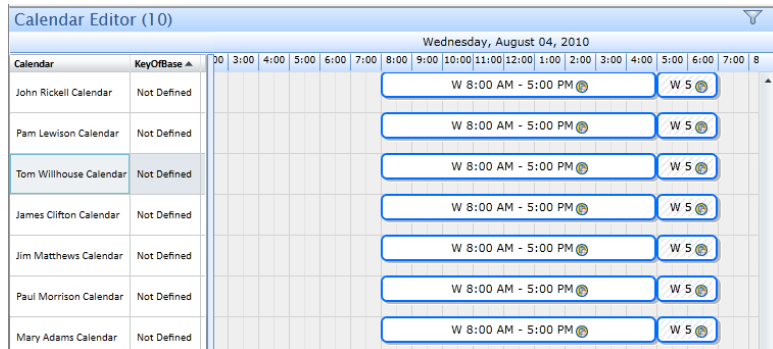
An organizational calendar should reflect the hours that an organization works. For example, an organizational calendar could be defined for five days a week, from Monday to Friday, from 9:00 AM until 5:00 PM each day. Similarly, a resource's calendar should reflect the hours that a resource works. For example, a resource's calendar could be defined for five days a week, Monday to Friday, from 7:00 AM until 12:00 PM, and from 2:00 PM until 6:00 PM.

A calendar can be based on an existing calendar. In this case, the following conditions apply:

- Any changes made to the base calendar are applied to the current calendar. For example, if you use a base calendar defining organizational holidays, then an additional holiday defined in the base calendar will apply to any objects that use the current calendar.
- If you use a base calendar, and define intervals for a certain day on which the base calendar also has defined intervals, then the result is that the resource working according to this calendar will have the combination of the intervals from the base calendar and the current calendar. For example, if according to the base calendar the resource is working on Monday, 9-17 and



- **Calendar Mode:** Lists the calendars for the loaded domain and the calendars and their base calendars, and shows their timing on the chart.



To load all the calendars, refer to Loading Calendars.

To change the Calendar Editor mode, right-click anywhere in the Calendar Editor Panell and select **Calendar mode** or **Resource mode**, as applicable.

The activities that can be performed in the Calendar Editor include:

- **Loading Calendars**
- **Editing a Calendar**
- **Assigning a Calendar to a Resource**
- **Creating a Calendar Interval**
- **Moving a Calendar Interval**

## Loading Calendars

Although, by default, only calendars for resources in the loaded domain are loaded, you can load specific calendars or all calendars.

### ***To load a specific calendar:***

- In Calendar mode, right-click on the Calendar Editor and select **Update Calendar > Load <calendar name>**.

### ***To load all the calendars:***

- In Calendar mode, right-click on the Calendar Editor and select **Update Calendar > Load all calendars**. A notification message is displayed asking you to wait a few seconds while all the available calendars are loaded.

## Editing a Calendar

Using the Calendar Editor, you can:

- Change the name of the calendar assigned to a resource.
- Select a different calendar on which to base a calendar, provided that the new base calendar is in the same Time Zone.
- Add a time interval to the calendar in the Calendar form.

### **To edit a calendar in the Calendar form:**

1. Right-click on the resource or calendar name and select **Edit Calendar**. The Calendar form is displayed for the selected resource or calendar.

The screenshot shows a 'Calendar Form' window. At the top, there are two input fields: 'Calendar Name' containing 'Pam Lewison Calendar' and 'Calendar Base' with a dropdown menu showing 'Not Defined'. Below these are two tabs: 'Day' (which is selected and highlighted in orange) and 'Week'. The 'Day' tab displays the date 'Wednesday, August 04, 2010'. Underneath the date is a header for '4 Wednesday' with a pink background. The main area is a grid with a vertical time axis on the left. The time axis has labels for '12 AM', '1 AM', '2 AM', '3 AM', and '4 AM'. The grid cells are yellow. At the bottom of the window are 'OK' and 'Cancel' buttons.

**Note:** By default, the calendar is displayed for a single day. To display the calendar for the week, click **Week**.

2. To change the calendar on which this calendar is based, select a different calendar from the **Calendar Base** dropdown list.

3. To add a time interval to the calendar, double-click in the body of the Calendar Form. The following calendar interval form is displayed. Configure the properties of the time interval as described in Assigning a Calendar to a Resource.
4. Click **OK** to save your changes.

## Assigning a Calendar to a Resource

You can assign a calendar to a resource to which no calendar has been assigned or you can change the existing calendar assignment.

### **To assign a calendar to a resource:**

- In Resource mode, right-click the resource name and select **Update Calendar**. Select the calendar to be assigned to the resource from the popup menu. The selected calendar is assigned to the resource.

## Creating a Calendar Interval

You can add a time interval to one or more resources or a calendar directly from the Calendar Editor or in the course of editing a calendar. You can create single or recurrent intervals.

### **To create a single calendar interval:**

1. Right-click on the resource(s) or calendar in the Calendar Editor and select **Create Calendar Interval**. The Calendar Time Interval form is displayed.

2. To create a time interval for a specific date only, select **Single**.
3. In the **Date** field, type the date or click the **Calendar** icon to select a date from the Calendar.

4. In the **Start time** and **Finish Time** fields, set the start and end times of the interval.
5. From the **Type** dropdown list, select type of time interval:
  - **Working** (active working hours)
  - **Non-Working** (inactive hours, such as vacation time or sick leave)
  - **Supervision** (hours allocated for supervising work; not available for scheduling)
  - **Optional**

**Note:** The system administrator can define that Resources can only work during Working hours, or during both Working and Optional hours. It is also possible to define that the number of Optional hours should not exceed a certain limit and/or that use of Optional hours should be minimized.

6. Click **OK** to save your changes.

**To create recurrent calendar intervals:**

1. Right-click on the resource(s) or calendar in the Calendar Editor and select **Create Calendar Interval**. The Calendar Time Interval form is displayed.
2. To create a time interval that recurs on a weekly basis, select **Recurrence**. The Calendar Time Interval form is refreshed to include additional fields.

The screenshot shows a dialog box titled "Calendar Time Interval Create Form". It has two radio buttons at the top: "Single" (unselected) and "Recurrence" (selected). Below the radio buttons are seven checkboxes for days of the week: Wednesday, Thursday, Friday, Saturday, Sunday, Monday (checked), and Tuesday. Below the checkboxes are two time input fields: "Start Time:" with "8:00 AM" and "Finish Time:" with "5:00 PM". Below the time fields is a "Type:" dropdown menu with "Working" selected. Below the dropdown menu is a "Period" checkbox (unselected). Below the "Period" checkbox are two empty input fields labeled "Start:" and "Finish:". At the bottom right of the dialog box are "OK" and "Cancel" buttons.

3. Select the relevant day(s) of the week.
4. In the **Start time** and **Finish Time** fields, set the start and end times of the interval.
5. From the **Type** dropdown list, select type of time interval:

- **Working** (active working hours)
- **Non-Working** (inactive hours, such as vacation time or sick leave)
- **Supervision** (hours allocated for monitoring/supervision purposes)
- **Optional**

**Note:** The system administrator can define that Resources can only work during Working hours, or during both Working and Optional hours. It is also possible to define that the number of Optional hours should not exceed a certain limit and/or that use of Optional hours should be minimized.

6. If the interval is intended for a specific period of time only, select the **Period** checkbox and set the start and end dates of the relevant time period in the **Start** and **Finish** fields. Click **OK** to save your changes.

## Moving a Calendar Interval

You can move an existing time interval for a resource or calendar on the Calendar Editor chart.

### ***To move an interval on the Calendar chart:***

1. Select the existing interval on the Calendar Editor chart, and drag and drop it to a different time. A popup message prompts you to confirm that you want to move the time interval.
2. Click **OK** to confirm the move.

## CHAPTER 8

# Managing Messages

Effective communication is a critical factor in the running an effective service operation. The Messaging Panel enables smooth one-to-one and one-to-many communication between dispatcher, Resources and other personnel in your organization.

By having access to the most recent scheduling information, you will be prepared to handle any scheduling exceptions that may occur.

This chapter includes the following topics:

- **Overview of Message Management**
- **Viewing Incoming Messages**
- **Sending a Message**
- **Replying to a Message**
- **Forwarding a Message**

## Overview of Message Management

ClickSchedule Messages View Panell enables you to send and receive messages pertaining to schedule-related information.

Incoming messages are automatically placed in the Inbox tab of the Messages View Panell. Outgoing messages are saved in the Outbox tab.

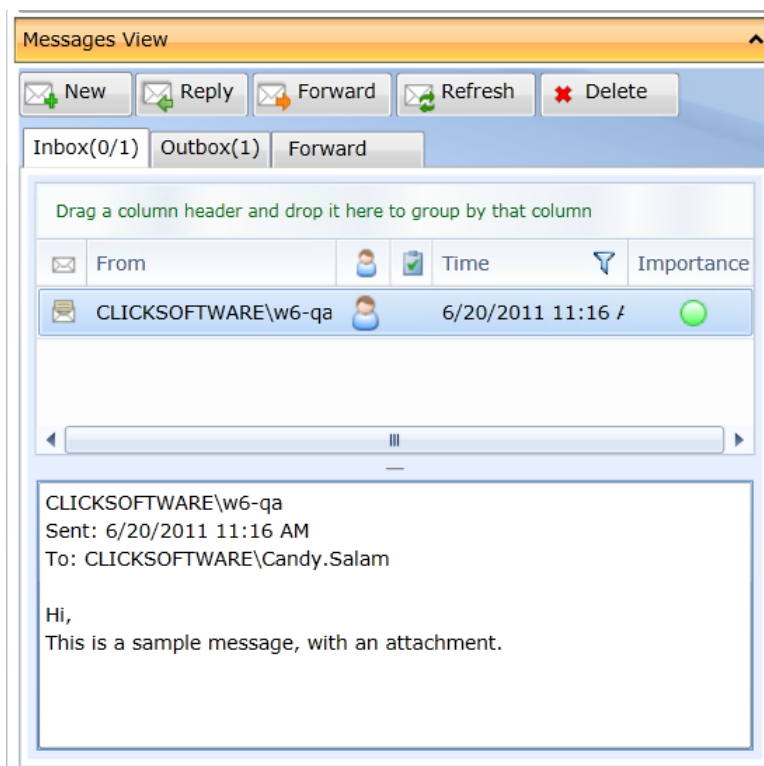
In addition, resource and task forms can be attached to a message, further enhancing communication within the organization.

## Viewing Incoming Messages

Incoming messages are automatically placed in the Inbox tab of the Messages View Panell. Sent messages are saved in the Outbox tab.

### **To view incoming messages:**

1. Expand the Messages View Panell. By default, the Inbox opens.



The summary information for incoming messages appears in the upper Panel of the Panell. For unread messages, this information appears in bold text.

The following icons indicate that a message includes an attachment:



: A resource is attached.



: A scheduled task is attached



: An unscheduled task is attached.


2. The priority assigned to the message is indicated by the color of the icon in the Importance column: Low (blue), Normal (green), or High (red). Select a message to view its content in the lower Panel of the Messages View Panel.
3. To view a resource attachment, right-click the attachment icon and select **Show Resource > On Map/ On Gantt**.
4. To view a task attachment, right-click the attachment icon and select **Show Task > On Map/ On Gantt**.

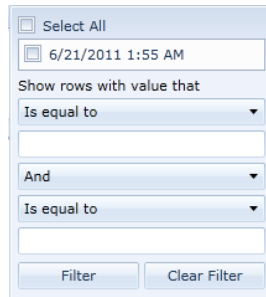
**Tip:** To check for messages and refresh the Messages list, click **Refresh**.

## Filtering Messages

ClickSchedule enables you to filter the messages displayed in your Inbox or Outbox according to sender/recipient or date/time.

### **To filter messages:**

1. In the Inbox or Outbox, click the **Filter** icon  in the header for the column according to which you want to apply a filter. For example, if you want to filter according to time/date, the following pop-up appears.




2. Select the filter criteria as required.
3. Click **Filter**. The messages that meet your specifications are displayed in the Messages list. (The filter icon is filled in to indicate the column to which a filter is applied.)

### **To remove the filter from a filtered messages list:**

- Click the **Filter** icon  and click **Clear Filter** in the pop-up Panel.

### **To change the filter criteria:**

- Click the **Filter** icon  and edit the filter criteria settings in the pop-up Panel. Then click Filter.

## Deleting Messages

ClickSchedule enables you to delete unwanted or unnecessary messages from the Messages list. For example, you may want to clear messages that have already been dealt with.

### **To delete messages:**

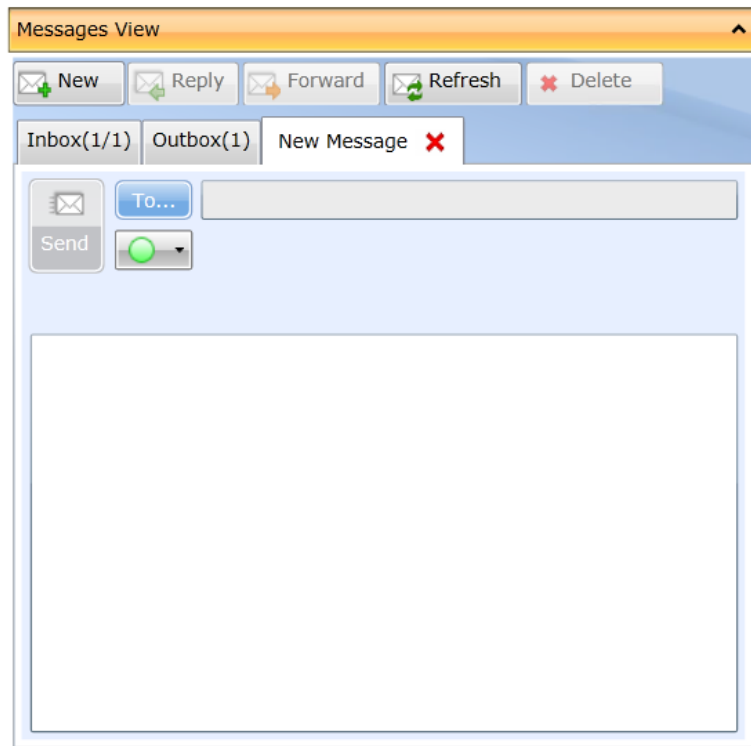
- In the Inbox or Outbox, select the message that you want to delete and click **Delete**. The selected message is deleted.

## Sending a Message

The ClickSchedule web client enables you to send messages from the Messages View Panell.

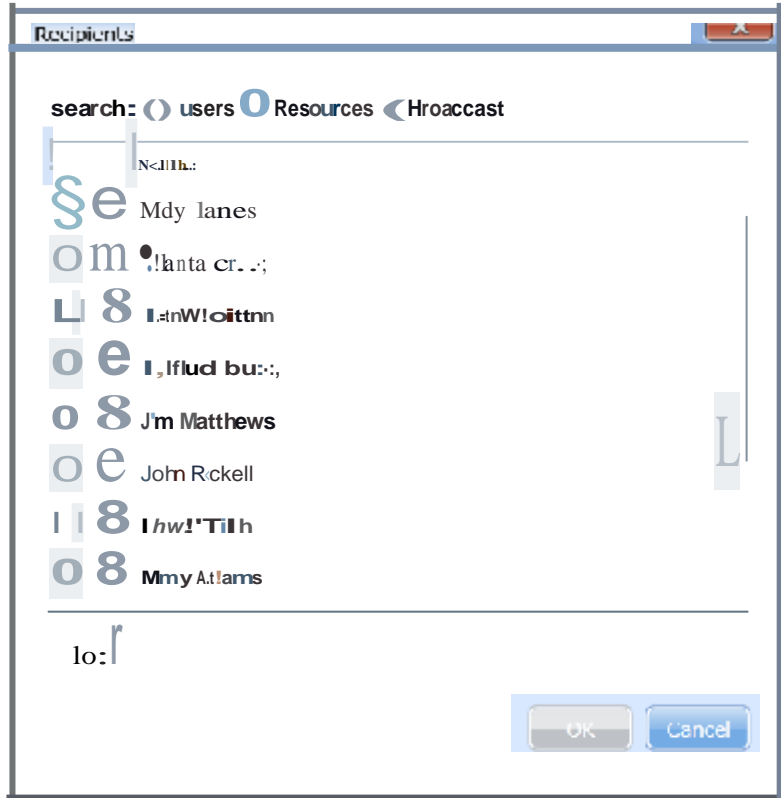
### **To send a message:**

1. In the Messages View Panell, click **New**. A New Message tab is added to the Panell.



**Tip:** You can right click a resource on the Resource Gantt list and select Send Message to open the New Message tab directly from the Resource Gantt chart. The resource is automatically entered in the To:field.

2. Click the To button to select the person(s) to whom you want to send the message. The Recipients dialog box is displayed.



3. Select the recipient(s) in one or more of the following ways:
  - To select from the list of dispatchers, select the **Users** option, and then select the checkboxes for each of the intended recipients.
  - To select from the list of Resources/field service representatives, select the **Resources** option and then select the checkboxes for each of the intended recipients.
  - To send the message to **all** of the loaded business units, select the **Broadcast option** and then select the business unit. The message will appear in the Messages Panell when the dispatcher loads the relevant business unit.

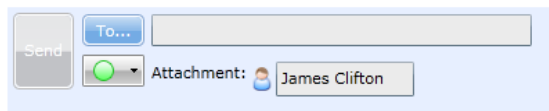
Tip: To select one or of the units within a region or business unit, expand the unit and select the required units.

The selected dispatchers, resources, and/or business units appear in the **To:** field.

4. Click **OK** to close the Recipients dialog box and return to the New Message tab.



5. From the Priority drop-down list, select the message's level of importance (Low, Normal, or High).
6. Enter the text of the message.
7. To attach a resource, task, assignment, or N/A, select it on the Resource Gantt or Job List and drag it into the mail message. The attachment is added to the message header.



**Note:** You can attach more than one object to a message, but you can only attach one object of each type. For example, you can attach a resource and a task, but you cannot attach two resources to the same message.

**Tip:** To remove an attachment from the message before sending it, right-click the attachment and select **Detach**.

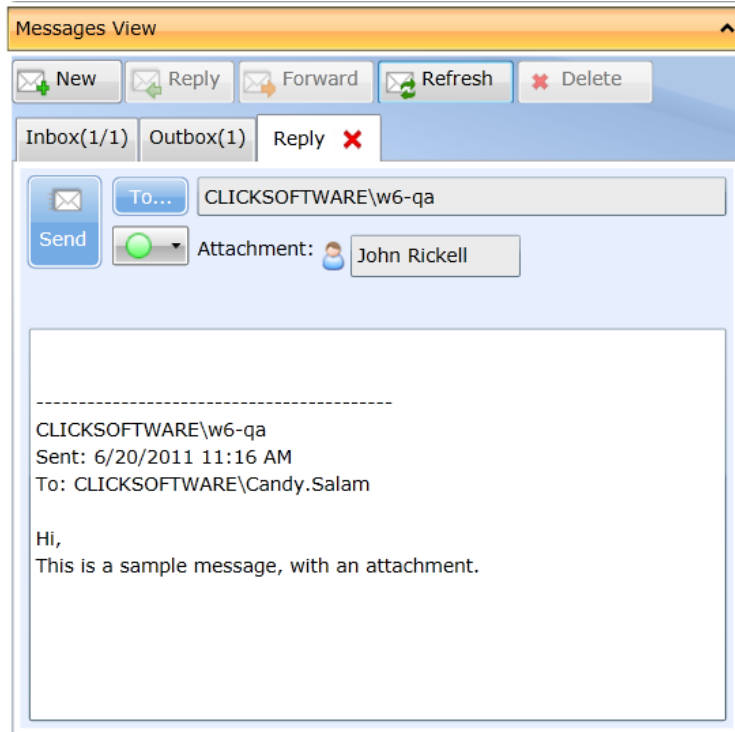
8. Click **Send**. The message is automatically sent to the recipient(s) and is placed in your Outbox.

## Replying to a Message

The ClickSchedule web client enables you to send a reply to a message that appears in your Inbox.

### **To reply to a message:**

1. In the Inbox, select the message to which you want to reply. A Reply tab is added to the Messages View Panell.



The user name of the person who sent the message appears in the **To** field, and the original text of the message is included in the message box.

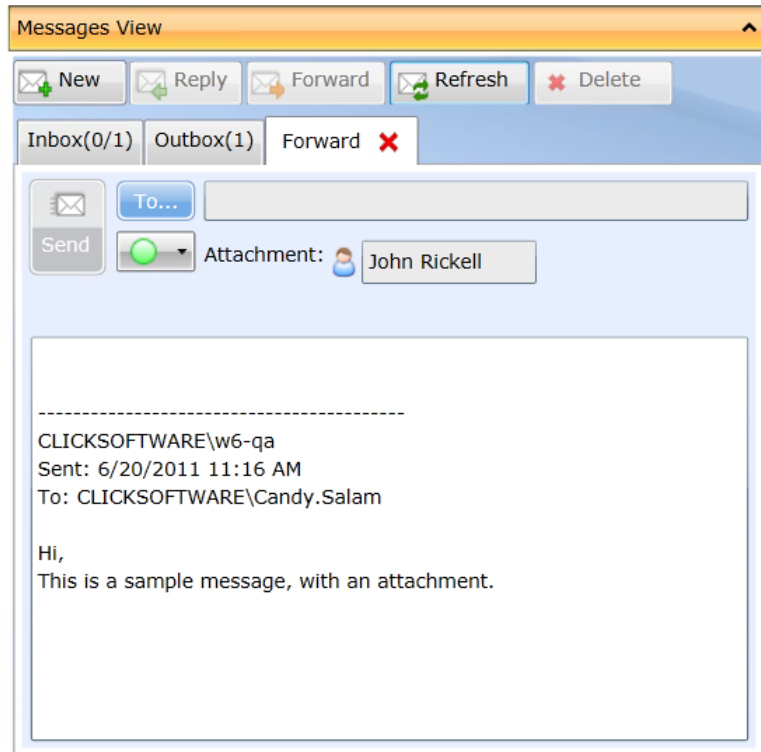
2. Enter a message and/or edit the properties of the message as required. (For details, see [Sending a Message](#) on page 97.)
3. Click **Send**. The message is automatically sent to the recipient(s) and is placed in your Outbox.

## Forwarding a Message

The ClickSchedule web client enables you to send a forward a message that you receive to another user.

### **To forward a message:**

1. In the Inbox or Outbox, select the message to which you want to reply. A Forward tab is added to the Messages View Panell.



2. Select the intended recipient(s), as described in Sending a Message on page 97.
3. Edit the message text and properties as required.
4. Click **Send**. The message is automatically sent to the specified recipient(s) and is placed in your Outbox.

---

# Glossary

This appendix provides a glossary of terms to assist you when using the ClickSchedule web client.

## Active Time

Active time applies to both the customer and the resource. Scheduling can only occur when the active time of both the customer and the resource correspond.

- **Customer active time:** The hours that a customer is able to receive service, for example, the customer's business hours.
- **Resource active time:** The hours that a resource works. This includes his or her daily working hours less any exceptions, for example, vacation or sick leave.

## Automatic Scheduling Service

The Automatic Scheduling service is the part of ClickSchedule that takes tasks (that have been provided from the CRM/ERP system or have been defined in ClickSchedule) and schedules them automatically, according to predefined rules and objectives.

## Availability

Availability refers to the time that a resource is available to be scheduled for tasks. This includes the daily working hours, but does not include vacation times, sick leave, and so on.

## Calendar

A Calendar defines the resource's availability that it will be considered in creating the schedule. The calendar usually represents the time that an organization operates, as well as the individual resource availability times, such as planned vacation, working shifts, and so on.

## CIS (Customer Interaction System) / SMS (Service Management System) / ERP (Enterprise Resource Planning System) / eService System

A family of products that automates several aspects of the relationship between an organization and its customers. These systems usually consist of several modular applications, such as Call Management, Sales Automation, Customer Support, Field Service and Help Desk. Integration with ClickSchedule provides the organization with intelligent scheduling capabilities that are lacking from these systems.

## Database

The ClickSchedule database stores all application data. When you use ClickSchedule, it accesses information, such as scheduling information and rules, from this database.

## Domain

The domain is the time period and region(s) that are loaded to ClickSchedule from the database. When the ClickSchedule Client is loaded, the tasks and resources displayed fall within the specific time period for a selected business entity.

## Filter

Filters enable you to display only specific types of information in the ClickSchedule views. You can filter information when you have large volumes of data to display or if you want to focus on a specific set of data.

## Inactive Time

Inactive time applies to both the customer and the resource. Scheduling cannot occur during customer or resource inactive times.

- **Customer inactive time:** The hours that a customer is unable to receive service, for example, after the customer's business hours.
- **Resource inactive time:** The hours that an Resource/resource is not working. This includes his or her non-working hours, vacation time or sick leave.

## Map View

The ClickSchedule Map view enables you to see a visual display of scheduled tasks, resources and their home bases on the map of the designated area with which you are working. You can also see actual distances and routes between service requests. This aids the scheduling process by helping you determine which resource is closest to which service request.

## Multi-Stage Task

A Multi-Stage Task (MST) is a task that comprises two or more subtasks with time and resource dependencies between them. For example, two tasks that require the same resource.

## Non-Availability (N/A)

Non-availability is the time that a resource is not available to be scheduled for tasks, for example, vacation time, or sick leave. Non-availability can be represented in ClickSchedule in two ways:

- Non-working time defined in the resource's calendar.
- Non-availability defined for the resource on the Resource Gantt Chart.

## Resource

The resource is the field service representative used by your organization. This can be an Resource, technician or any other type of service personnel that you define in ClickSchedule. The defined resources are displayed in the Resource List, and the Resources' tasks are displayed in the Resource Gantt chart.

## Resource List

The Resource List is a part of the Resource Gantt chart view that lets you see all the Resources defined in the system.

## Resource Gantt Chart

The Resource Gantt chart is a view in ClickSchedule that lets you easily see all Resources' scheduled tasks, non-availability times, and time conflicts. It enables you to see how tasks are scheduled over the current time period and which time slots are still available for interactive scheduling.

## Rule Violation

A rule violation occurs when predefined scheduling rules are not adhered to when scheduling a task. A Rule Violations dialog box is displayed on your screen, listing the rules that have been violated. You can either choose to ignore the rules and schedule anyway or cancel the scheduling. Examples of rule violations include travel time conflicts and tasks that are not scheduled between their early start and due date.

## Schedule Automatically

ClickSchedule can automatically schedule tasks coming from the CRM/ERP system and match the task's requirements (for example, early start, duration, and due date) to the appropriate Resource's interval on the Resource Gantt Chart, according to predefined business rules and objectives. The majority of tasks are scheduled automatically by ClickSchedule. Tasks which cannot be scheduled automatically can then be scheduled interactively.

## Schedule Interactively

ClickSchedule enables the scheduler to schedule tasks interactively when tasks cannot be scheduled automatically. This is done by selecting an unscheduled task from the Job List and dragging and dropping it to the desired interval on the Resource Gantt Chart. If the task conforms to the predefined scheduling rules, the task is scheduled. If the task violates certain scheduling rules, a list of these rules is displayed. You can then choose to schedule the task anyway or cancel the scheduling.

## Scheduling

Scheduling is the process of finding the best-suited Resource to fill a specific task. Scheduling is either performed automatically by ClickSchedule or interactively by the scheduler in the ClickSchedule Main window.

When scheduling interactively, a list of rule violations is displayed, if there are any. When using the Automatic Scheduling service, ClickSchedule does not violate any of the predefined rules and tries to create as "good" a schedule as possible, based on the predefined objectives.

## Tasks

Tasks are service requests that have been transferred from the CRM/ERP system to ClickSchedule and can then be assigned to a specific resource at a specific time. Tasks can also be entered directly in ClickSchedule.

## Task Dependencies

Task dependencies can be time-related or Resource-related, and define the relationship between stages of a multi stage task. A time dependency determines when a task can be performed, in relation to another task. An Resource dependency determines whether the same Resource should be scheduled to two tasks.

## Job List

The Job List view displays a list of tasks in ClickSchedule, providing quick access to a variety of details for both scheduled and unscheduled tasks. The information displayed can include resource name, task number, location and early start and due date. This information can be customized to meet your specific requirements by selecting and displaying any task property.

## User Name

The name that you use to log on. ClickSchedule uses the same user name for its own internal purposes.

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