



# **SmartCapacity User Guide**

Part Number E62342-01



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# About this Document

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This document describes the general principles on which the ETAdirect system is based. It is intended for the personnel who work with ETAdirect.

 **Important:** This document explains how to accomplish tasks in the Sunrise demo instance of ETAdirect. If your instance of ETAdirect is configured differently or if you have customized your instance, your screens, labels, and processes may differ from those described in this guide.

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# Getting Started with ETAdirect

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ETAdirect can help you complete your day-to-day tasks faster and more accurately than traditional or manual workforce management tools. In particular, you can use ETAdirect to:

- **Understand what is happening in the field right now.** Use the Time View to see at a glance where resources are working and what they are working on. You can easily see who is at a job site and who is traveling as well as the status of their activities.
- **Reduce calls to and from the field looking for a resource to take a new job.** At a glance, you can tell whether the resource has time available for additional work.
- **Place new work on a route quickly and easily.** If the resource does have time, you can move work to the route.
- **Respond to jeopardy situations immediately.** When an activity is a risk, you can move it to avoid the service window being missed.





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# Chapter 1

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## Introducing Capacity-Based Quota Management

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### Topics:

- [SmartCapacity Components](#)

SmartCapacity helps you achieve optimal resource utilization. When you use ETAdirect to plan resource capacity in advance, you can forecast resource allocation and identify where quota is being under utilized or over utilized.

**Capacity management:** Managing the volume of your workforce. The goal is to ensure that you have just enough qualified field resources for the expected types and amount of work.

**Quota Management:** Focuses on allocating work across shifts and time slots that makes the most of field resource availability.

In ETAdirect, you can manage quota and capacity together through the Quota Management matrix. ETAdirect will automatically populate the matrix with real-time data based on your company's own experience. You can then manually change the quota values to meet your business needs.

## SmartCapacity Components

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The SmartCapacity features use several core ETAdirect components. These components work together to provide accurate and timely capacity information.

- **Work Skills:** A client-specific set of skills assigned to resources, to determine both their skills and their level of qualification within each skill.
- **Work Conditions:** The rules that ETAdirect uses to assign required work skills and work skill levels to activities.
- **Capacity Categories:** Activities with similar work skill requirements grouped together for quota management purposes.
- **Time Slots:** The amount of quota reserved for a certain capacity category at a particular time of day. Time slots are associated with buckets and individual capacity categories, defining which time slots will be used in the capacity management grid. Time slots are also used to manage activities.

When all of the components are configured correctly, you can define quota for combinations of capacity categories and time slots.

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# Chapter

# 2

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## Configuring SmartCapacity

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### Topics:

- [\*Setting up SmartCapacity for the First Time\*](#)
- [\*Configuring Work Skills\*](#)
- [\*Configuring Work Skill Conditions\*](#)
- [\*Recalculating Appointments\*](#)
- [\*Assigning Work Skills to Resources\*](#)
- [\*Configuring Capacity Categories\*](#)
- [\*Determining Resource Capacity Categories\*](#)
- [\*Enabling Quota Management\*](#)
- [\*Configuring Time Slots\*](#)
- [\*Configuring Major and Critical Capacity Usage\*](#)
- [\*Defining Units of Measurement for Quota\*](#)
- [\*Adjusting Available Capacity\*](#)

Before you can use ETAdirect to manage capacity and quota, you must configure the system.

SmartCapacity must be configured to the particular needs and standards of your environment. This involves defining work skills, setting both calendars and standards on which appointments are based.

## Setting up SmartCapacity for the First Time

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Use the list below to guide you through these important first steps.

- **Create work skills:** Work skills are the common language that ETAdirect uses to match activities to qualified resources. See [Creating a New Work Skill](#) for details.
- **Assign work skills and work skill levels to Resources:** You must assign the work skills to the resources that have these skills. Use work skill levels to define the level of expertise the resource has with the work skill. See the ETAdirect Manage User Guide for details.
- **Create work skill conditions:** ETAdirect uses work skill conditions to automatically assign required work skills and required work skill levels to activities. See [Creating a Work Skill Condition](#) for details.
- **Create capacity categories:** Capacity categories are used to divide the quota for a given time slot by type of activity. Create a capacity category for each of the types of activities your resources perform.

For example, you might create one capacity category for Installations, one for Deinstallations, one for Upgrades, and one for Trouble Calls. Capacity categories are linked to the work skills that are required for the activities in the category so that ETAdirect can allocate the appointment to the right capacity category. See [Creating a Capacity Category](#) for details.

- **Create time slots:** You can use time slots to control the amount of quota that is reserved for a certain capacity category at a particular time of day. Time slots are also used for activity management. See [Creating a Time Slot](#) for details.
- **Enable Quota Management:** You must enable this feature on the buckets that you want to use to manage quota. See [Enabling Quota Management](#) for details.
- **Configure major and critical capacity usage:** When used capacity reaches major or critical levels, it displays in a different color on the quota matrix. See [Configuring Major and Critical Capacity Usage](#) for details.
- **Define the units of measurement used for Quota:** ETAdirect supports the option of choosing the units of measurement to display Quota/Used values. See [Defining Units of Measurement for Quota](#) for details.
- **Adjust available capacity:** Quota that is defined as a percentage of capacity must be recalculated regularly to account for changes in resource allocation, work skills and other variables.. See [Adjusting Available Capacity](#) for details.

## Configuring Work Skills

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ETAdirect uses work skills to assign activities to resources. Work skills identify:

- The expertise that a resource has.
- The expertise that is required for an activity.

You must create the work skills and then assign them to resources and work skill conditions.

### Creating a New Work Skill

ETAdirect matches resources to activities through shared work skills.

You must create the a work skill first then apply it to resources and work skill conditions. Work Skills have to be enabled through the support in the Business Rules section of Company Settings before you can create work skills.

Follow these steps to create a work skill:

1. Enable **Work Skills Support** in the Business Rules section of **Company Settings**.
2. Click **Company Settings** and select **Work Skills** from the drop-down menu. The **Work Skills** screen displays.

ID	Name	Label	Status
133	Deinstall	DI	✓
134	Downgrade	DW	✓
130	Install	IN	✓
136	Non-Pay	NP	✓
137	Restart/Reconnect	RS	✓
135	Service Request Order	SR	✓
131	Trouble Call	TC	✓
132	Upgrade	UP	✓

3. Click the **Add New** button. The **Work Skill** info window displays:

4. Use the list below to complete the fields.

- **Name:** Type a descriptive name for the work skill. For example, New Install, Video, or Outage. Select at least one language.
- **Label:** Type a unique code that is a short version of the work skill name.
- **Important:** Use only alphabetical characters. Do not use numbers.
- **Status:** Select Active or Inactive.

Active work skills can be assigned to resources and activities, are available for capacity categories, and are used by SmartRouting to match activities to resources.

Inactive work skills are not considered in any assignment decisions.

5. Click **Save**.

After you create a work skill, you must assign it to resources and work skill conditions. For instructions for assigning a work skill to a resource, see the ETAdirect Manage User Guide. For instructions for assigning a work skill to a work skill condition, see [Configuring Work Skill Conditions](#) in this guide. Work skill conditions identify the skills necessary to complete an activity. Those skills are assigned to an activity, during routing, ETAdirect matches the activities to a resources that has the same work skills.

Work skill conditions define the rules that ETAdirect uses to determine the work skills that apply to an activity. When ETAdirect receives an activity from the appointment booking system, it looks for items that match the conditions in the work skill conditions. When it finds a matching work skill condition, it assigns the work skills that are in the work skill condition to the activity.

## Example: Assigning Work Skills to Activities Based on Work Skill Conditions

ETAdirect uses work skill conditions to match incoming activities with required work skills.

In the following example, we use a work skill condition with the following requirements to match an incoming activity with the work skills required to complete the activity:

- **A work skill type of Install:** This requirement means that the activity must have a work skill type of install to receive the work skills that are in this work skill condition.
- **A required level of 50:** This requirement means that the activity must have a minimum work skill level of 50 for the Install work skill.
- **A preferable level of 70:** This requirement means that ETAdirect will prioritize this activity to be routed early in the routing process so that the more experienced resources are available. Preferable levels are on a scale from 0 to 100.
- **A condition that the activity has a work order type of Install:** This requirement means that the incoming activity must have a work order type of Install.
- **A condition that the activity requires VIP service:** This requirement means that the appointment must have the “VIP” note in the activity notes sections.

The work skill condition that meets these requirements looks like this:

The screenshot shows a dialog box titled "Edit work skill condition: 'Install(1/1)". It contains the following fields and controls:

- Work skill name:** A dropdown menu with "Install" selected.
- Required level:** A text input field containing the number "1".
- Preferable level:** A text input field containing the number "1".
- W/O Type [WO\_TYPE]:** A dropdown menu with "In" selected, followed by "IN" and a small edit icon.
- Activity Notes [ACTIVITY\_NOTES]:** A dropdown menu with "Contains" selected, followed by a text input field containing "VIP" and a small 'x' icon.
- Buttons:** "Add new condition", "Close", and "Save".

For example, the process of assigning a resource to an activity goes like this:

1. The customer service representative schedules an installation appointment in the appointment booking system. The appointment booking system assigns the appointment a work order type of install. It also adds an activity note of “VIP” because this customer is a preferred customer.
2. ETAdirect receives the activity from the appointment booking system.
3. ETAdirect identifies the work order type and the activity note on the appointment and then matches the appointment with the work skill condition that requires a work order type of install and an activity notes condition of VIP.
4. ETAdirect reviews the rest of the work skill condition to look for resource assignment requirements. In addition to the VIP requirement, this work skill condition also has a required level of 50 and a preferable level of 70.
5. During the routing process, ETAdirect routes this activity early because the preferable level is high. Doing so improves the chances of finding an available highly skilled resource.
6. ETAdirect looks for resources that have the work skill condition “VIP” and finds several.
7. ETAdirect looks in the list of available VIP-qualified resources for a resource that has a minimum work skill level for the install work skill of 50.
8. ETAdirect finds two available resources with a skill level of at least 50. Raul has a work skill level for Installs of 75 and Serena has a work skill level for installs of 55.
9. ETAdirect assigns the activity to Raul because his skill level is the closest match to the preferable level. Raul also has the VIP qualification and is available during the service window. He is the best match for the activity.

## Modifying an Existing Work Skill

You can change the name, label, or languages for an existing work skill.

Follow these steps to modify existing work skills:

1. Click **Company Settings** and select **Work Skills** from the drop-down menu. The Edit work skills window displays.
2. Click the check box next to the work skill you want to modify and then click the Pencil icon.


ID	Name ↑	Label	Status
<input type="checkbox"/> 133	Deinstall	DI	✓
<input type="checkbox"/> 134	Downgrade	DW	✓
<input type="checkbox"/> 130	Install	IN	✓
<input type="checkbox"/> 136	Non-Pay	NP	✓
<input type="checkbox"/> 137	Restart/Reconnect	RS	✓
<input type="checkbox"/> 135	Service Request Order	SR	✓
<input type="checkbox"/> 131	Trouble Call	TC	✓
<input type="checkbox"/> 132	Upgrade	UP	✓

3. The Edit Work Skill window displays.
4. Click **Save**.

## Activating, Deactivating or Deleting a Work Skill

When you activate a work skill, you make it available for use. Deactivating the work skill makes it unavailable for use. When you delete a work skill, you completely remove it from the ETAdirect system.

Follow these steps to delete, activate, or deactivate a work skill, follow these steps:

 **Note:** You cannot delete a work skill that is in use. If the work skill is in use, deactivate the work skill first and then delete it.

1. Click **Company Settings** and then select **Work Skills** from the drop-down menu.
2. Check the box next to the work skill that you want to delete, activate, or deactivate.

ID	Name ↑	Label	Status
<input type="checkbox"/> 133	Deinstall	DI	✓
<input checked="" type="checkbox"/> 134	Downgrade	DW	✓
<input type="checkbox"/> 130	Install	IN	✓
<input type="checkbox"/> 136	Non-Pay	NP	✓
<input type="checkbox"/> 137	Restart/Reconnect	RS	✓
<input type="checkbox"/> 135	Service Request Order	SR	✓
<input type="checkbox"/> 131	Trouble Call	TC	✓
<input type="checkbox"/> 132	Upgrade	UP	✓

3. Above the list of work skills, click **Delete**, **Activate**, or **Deactivate**.
4. Click **OK**.

## Configuring Work Skill Conditions

Work skill conditions identify the skills necessary to complete an activity. During routing, ETAdirect matches activities with the resources that have the same work skills.

Work skill conditions contain the rules to help dispatchers decide which work skills will be applied to an activity. ETAdirect receives an activity from the appointment booking system, it then looks for items that match the conditions in the work skill conditions.

### Creating a Work Skill Condition


ETAdirect uses work skill conditions to apply work skills to activities and to match activities with qualified resources.

Follow these steps to create a work skill condition:

1. Open the **Company Settings** tab and select **Work Skills Conditions** from the menu.
2. The **Work Skills Conditions** screen appears:

ID	Name	Status	Work skill conditions
<input type="checkbox"/> 4	Deinstall(1/1)	✓	W/O Type In DI Not selected: Upgrade
<input type="checkbox"/> 5	Downgrade(1/1)	✓	W/O Type In DW Not selected: Deinstall
<input type="checkbox"/> 1	Install(1/1)	✓	W/O Type In IN
<input type="checkbox"/> 7	Non-Pay(1/1)	✓	W/O Type In NP Not selected: Service Request Order
<input type="checkbox"/> 8	Restart/Reconnect(1/1)	✓	W/O Type In RS Not selected: Non-Pay
<input type="checkbox"/> 6	Service Request Order(1/1)	✓	W/O Type In SR Not selected: Downgrade
<input type="checkbox"/> 2	Trouble Call(1/1)	✓	W/O Type In TC Not selected: Install
<input type="checkbox"/> 3	Upgrade(1/1)	✓	W/O Type In UP Not selected: Trouble Call

3. Click the **Add new** button. The **Add work skill condition** dialog box is displayed.

 **Note:** Name the work skill a name to allow easy understanding of its use and differentiation from other work skills,

4. Use the following list to complete the fields.

- **Required Level:** Provide the minimum work skill level required. Valid values are 1 – 100. Resources must have work skill levels equal or greater than the activity to be considered for assignment.

ETAdirect uses this value to eliminate resources that do not have a high enough work skill level for the activity.

- **Preferable Level:** Provide the routing priority. Valid values are 1 – 100. Activities that have a work skill condition with a higher preferable level are routed first so that they are more likely to receive a resource with higher work skill levels.

For best results, assign a higher preferable level to an activity that requires advanced skills or skills that are difficult to find. This strategy ensures that the activity is staffed from the largest possible pool of resources.



After you create a work skill you must assign it to resources and work skill conditions. For instructions for assigning a work skill to a resource, see the **ETAdirect Manage User Guide**.

## Modifying a Work Skill Condition

1. Open the **Company Settings** tab and select **Work Skills Conditions** from the menu.
2. The **Work Skills Conditions** screen appears:

ID	Name	Status	Work skill conditions
4	Deinstall(1/1)	✓	W/O Type In DJ Not selected: Upgrade
5	Downgrade(1/1)	✓	W/O Type In DW Not selected: Deinstall
1	Install(1/1)	✓	W/O Type In IN
7	Non-Pay(1/1)	✓	W/O Type In NP Not selected: Service Request Order
8	Restart/Reconnect(1/1)	✓	W/O Type In RS Not selected: Non-Pay
6	Service Request Order(1/1)	✓	W/O Type In SR Not selected: Downgrade
2	Trouble Call(1/1)	✓	W/O Type In TC Not selected: Install
3	Upgrade(1/1)	✓	W/O Type In UP Not selected: Trouble Call

3. Hover over the work skill that you want to modify. The Pencil icon displays.

9	Install(50/70)		✓	W/O Ty Activity W/O Ty
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4. Click the Pencil icon to view details of the work skill condition for that particular work skill.

**Add work skill condition**

\* Work skill name: Install

\* Required level: 50

\* Preferable level: 70

W/O Type [W\_O\_TYPE]: In

Activity Notes [ACTIVITY\_NOTES]: Contains VIP

Buttons: Close, Save

5. Change the work skill condition.
6. Click **Save**.

**Important:** After you create, modify, or delete a work skill condition, you must recalculate appointments. See [Recalculating Appointments](#) for details.

**Important:** Click the **Company Settings** tab and select the Work Skill Conditions menu item. The **Work Skills** conditions screen appears.

## Deleting a Work Skill Condition

When you no longer need a work skill condition you can delete it.

Click the **Company Settings** tab and select the Work Skill Conditions menu item.

1. Check the boxes next to the work skills and work skill conditions that you want to delete.
2. Above the list of work skills and work skill conditions, click **Delete**.

The screenshot shows the ETAdirect interface with the 'Company Settings' menu open and 'Work skill conditions' selected. The table below lists various work skill conditions with their IDs, names, and statuses. A 'Recalculate Activities' button is visible at the top of the table area.

ID	Name +	Status	Work skill conditions
<input checked="" type="checkbox"/> 4	Deinstall(1/1)	✓	W/O Type In DI Not selected: Upgrade
<input type="checkbox"/> 5	Downgrade(1/1)	✓	W/O Type In DW Not selected: Deinstall
<input type="checkbox"/> 1	Install(1/1)	✓	W/O Type In IN
<input type="checkbox"/> 7	Non-Pay(1/1)	✓	W/O Type In NP Not selected: Service Request Order
<input type="checkbox"/> 8	Restart/Reconnect(1/1)	✓	W/O Type In RS Not selected: Non-Pay
<input type="checkbox"/> 6	Service Request Order(1/1)	✓	W/O Type In SR Not selected: Downgrade
<input type="checkbox"/> 2	Trouble Call(1/1)	✓	W/O Type In TC Not selected: Install
<input type="checkbox"/> 3	Upgrade(1/1)	✓	W/O Type In UP Not selected: Trouble Call

3. Click **OK**.

**Important:** After you create, modify, or delete a work skill condition, you must recalculate appointments. See [Recalculating Appointments](#) for details.

## Recalculating Appointments

After you create, modify or delete any work skill or work skill condition, you must recalculate the activities. This action updates any activities that were assigned to the work skills or work skill conditions.

**Important:** Perform these steps after hours to avoid changing activities that are already routed.

1. Click **Company Settings** and select **Work skill conditions** from the drop-down menu.
2. Click **Recalculate Activities**.

The screenshot shows the ETAdirect interface with the 'Resource Settings' menu open and 'Work skill conditions' selected. The table now only displays one entry, 'Deinstall(1/1)', with its status set to '✓'. The 'Recalculate Activities' button is still present.

ID	Name +	Status
<input type="checkbox"/> 4	Deinstall(1/1)	✓

3. Click **OK**.

## Assigning Work Skills to Resources

Work skills and work skill conditions not only identify the resources that can perform the activities, but during the routing process can match these resources to the activities using the work skills as the common language.

## Configuring Capacity Categories

Capacity categories are used to divide the quota for a given time slot by type of activity.


You might create one capacity category for Installations, one for Deinstallations, one for Upgrades, and one for Trouble Calls. Capacity categories are linked to the work skills that are required for a activities in a category so that ETAdirect can automatically allocate appointments to the right capacity category.

### Creating a Capacity Category

Follow these steps to create a new capacity category:

1. Click **Company Settings** and then select **Capacity Categories** from the drop-down menu.
2. Click **Add New**. The Edit Capacity category screen displays.

3. Complete these fields to create a new capacity category:
  - **Name:** Enter the name of the capacity category. This is the name that will display in the list and in the quota matrix. If ETAdirect is configured for multiple languages, input boxes will appear for each language.
  - **Label:** Used within the context of the APIs. Should conform to a standard naming convention.
  - **Status:** Select Active or Inactive from the drop-down. Only active capacity categories will be used in the quota matrix.
4. Click **Save**.

 **Important:** After you create the capacity category, you must add work skills, work skill groups and time slots to the category.

### Adding Work Skills and Work Skill Groups to a Capacity Category

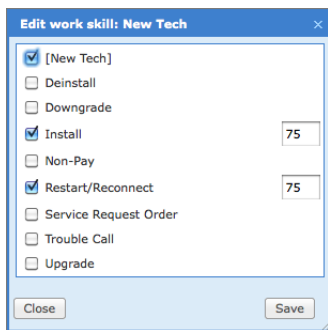
After you create the capacity category, you must add work skills and work skill groups to it.

Follow these steps to add work skills and work skill groups to a capacity category:

1. In the **Capacity Categories** list, hover over the **Work Skills** column. The Pencil icon displays.

ID	Name	Label	Status	Work Skills	Time slots
141	Deinstall	DI	✓	Deinstall(1)	15-17
142	Downgrade	DW	✓	Downgrade(1)	
138	Install	IN	✓	Install(1)	08-10; 10-12; 13-15; 15-17
144	Non-Pay	NP	✓	Non-Pay(1)	
145	Restart/Reconnect	RS	✓	Restart/Reconnect(1)	15-17
143	Service Request Order	SR	✓	Service Request Order(1)	
139	Trouble Call	TC	✓	Trouble Call(1)	08-10; 10-12; 13-15; 15-17
140	Upgrade	UP	✓	Upgrade(1)	08-10; 10-12; 13-15; 15-17

2. Click the Pencil icon to open the **Edit work skills** dialog box.
3. Select the work skills and work skill groups that you want to include in the category. Work skill groups have square brackets [ ] around the names.



- Optional:** Type the work skill levels in the fields to the right of the work skills and work skill groups.

Work skill levels assigned in capacity categories are used to limit capacity categories to activities that require a certain work skill level. For example, you might create two capacity categories for installations, one for simple installations and one for complex installations. Both capacity categories would require the installation work skill, but the work skill level for the installation work skill would be lower for simple installations than it would be for complex installations.

- Click **Save**.



**Note:** When you create multiple capacity categories that share some of the same work skills, then ETAdirect treats all of those work skills as one. When an activity is assigned work skills, ETAdirect consumes the minutes used from ALL capacity categories sharing that work skill.

### Adding Time Slots to a Capacity Category

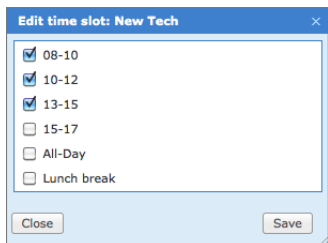
After you create a capacity category you must define the time slots that it is used in.

Follow these steps to add time slots to a capacity category:

- Click **Company Settings** and select **Capacity Categories** from the drop-down menu. Hover over the Time Slot column of the capacity category. The Pencil icon displays.
- Click the Pencil icon to open the screen.

<input type="checkbox"/>	ID	Name	Label	Status	Work Skills	Time slots
<input type="checkbox"/>	141	Deinstall	DI	✓	Deinstall(1)	15-17
<input type="checkbox"/>	142	Downgrade	DW	✓	Downgrade(1)	
<input type="checkbox"/>	138	Install	IN	✓	Install(1)	08-10; 10-12; 13-15; 15-17
<input type="checkbox"/>	144	Non-Pay	NP	✓	Non-Pay(1)	
<input type="checkbox"/>	145	Restart/Reconnect	RS	✓	Restart/Reconnect(1)	15-17
<input type="checkbox"/>	143	Service Request Order	SR	✓	Service Request Order(1)	
<input type="checkbox"/>	139	Trouble Call	TC	✓	Trouble Call(1)	08-10; 10-12; 13-15; 15-17
<input type="checkbox"/>	140	Upgrade	UP	✓	Upgrade(1)	08-10; 10-12; 13-15; 15-17

- Select the time slots you want to assign to this capacity category.



- Click **Save**.

## Modifying a Capacity Category

Follow these steps to edit an existing capacity category:

1. Click **Company Settings** and select Capacity Categories from the drop-down menu.
2. Hover over the field that you want to change. The Pencil icon displays.
3. Click the Pencil icon. The editing dialog box displays.
4. Change the selections.
5. Click **Save**.

## Deleting a Capacity Category

Follow these steps to delete a capacity category:

1. Click **Company Settings** and select Capacity Categories from the drop-down menu.
2. Check the checkboxes next to the capacity categories that you want to delete.
3. Click **Delete**.

ID	Name	Label	Status	Work Skills	Time slots
<input checked="" type="checkbox"/>	Deinstall	DI	✓	Deinstall(1)	15-17
<input type="checkbox"/>	Downgrade	DW	✓	Downgrade(1)	
<input type="checkbox"/>	Install	IN	✓	Install(1)	08-10; 10-12; 13-15; 15-17
<input type="checkbox"/>	Non-Pay	NP	✓	Non-Pay(1)	
<input type="checkbox"/>	Restart/Reconnect	RS	✓	Restart/Reconnect(1)	15-17
<input type="checkbox"/>	Service Request Order	SR	✓	Service Request Order(1)	
<input type="checkbox"/>	Trouble Call	TC	✓	Trouble Call(1)	08-10; 10-12; 13-15; 15-17
<input type="checkbox"/>	Upgrade	UP	✓	Upgrade(1)	08-10; 10-12; 13-15; 15-17

4. Click **OK**.

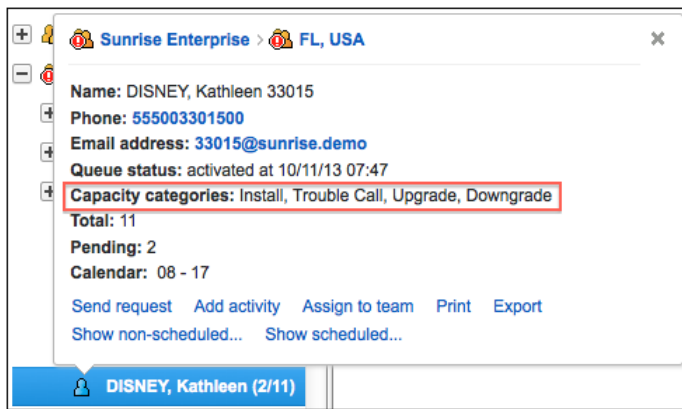
## Determining Resource Capacity Categories

When the maximum available capacity is to be calculated at the capacity category level, the capacity categories per resource should be determined.

A resource is assigned certain work skills with their respective levels. Capacity categories include work skills for which the minimum required level can be defined, or work skill groups. A resource matches a capacity category if their work skills are equal or greater than those defined for the capacity category. When a capacity category includes work skill groups, a resource matches the capacity category if it has at least one of the work skills of the group.

When no work skills are assigned to a capacity category, the capacity category includes all activities with no required work skills. Such activities can be assigned to any resource having any work skills, therefore, to all resources in the system. Consequently, resources with no work skills defined (effectively, having all work skills at the highest level) match all capacity categories in the system.

The resource work skills can be viewed in the Resource Info screen or resource hint.



The capacity categories of resources are recalculated in the following situations:

- On application server start
- On resource cache reload
- On resource work skills modifications
- On the recalculate activities action performed in the Capacity categories and Work skill groups screens

## Enabling Quota Management

You must enable Quota Management in every bucket that you want ETAdirect to consider when calculating capacity.

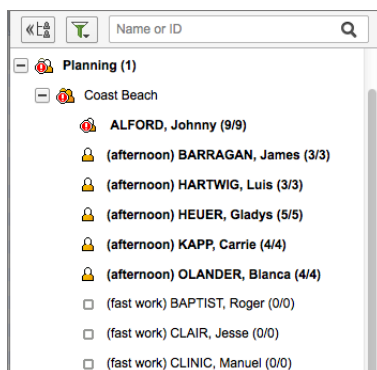
Consider these key concepts about Quota Management:

- Enabling **Quota Management** allows you to manually or automatically adjust quota for the current day, a future date or a range of days, based on the time that resources within the bucket have available.
- If a bucket is not enabled for quota management, the items inside it will not be included in the quota matrix.
- Tracking only a select group of available and active work skills and work skill groups does not affect the ability to book all activity types.

### Enabling Quota Management at the Bucket Level

Quota Management can be only be enabled at the bucket level.

Follow these steps to manage quota by region, you might create a group for all of the resources in a certain region and then create a bucket inside that group to use for quota management. Follow these steps to manage quota for the entire workforce at once, you might create one bucket for the whole workforce and then divide the workforce into groups inside the bucket. That structure may look like this:



The quota for a group or bucket that has “child” capacity buckets will be an aggregation of quota of those subordinate buckets. You cannot edit quota at the aggregate level.

Follow these steps to enable Quota management for a bucket:

1. In the **Resource Tree**, select the bucket for which you want to enable quota management.
2. Click **Resource Settings** and select Resource/Bucket Info from the drop-down menu.
3. Check the *Quota Management* box to enable Quota Management for this bucket and add management information to your Quota matrix.

Other Attributes	
Quota management	<input checked="" type="checkbox"/>
Routing profile	Routing (Region 3-5)
Quota management	
Time slots	08-10, 10-12, 13-15, 15-17
Capacity categories	Deinstall, Downgrade, Install, Non-Pay, Restart/Reconnect, Service Request Order, Trouble Call, Upgrade
Quota is entered for	<input checked="" type="checkbox"/> day <input checked="" type="checkbox"/> time slot <input checked="" type="checkbox"/> capacity category
Quota can be closed for	<input checked="" type="checkbox"/> day <input checked="" type="checkbox"/> time slot <input checked="" type="checkbox"/> capacity category <input checked="" type="checkbox"/> work zone
Estimate maximum capacity for	<input checked="" type="checkbox"/> day <input checked="" type="checkbox"/> time slot <input checked="" type="checkbox"/> capacity category

4. Additional options are displayed under Quota Attributes.
5. Click the Pencil icon to select the **Time Slots** that will be used for Quota Management in this bucket.
6. Click the Pencil icon to select the **Capacity Categories** that will be used for Quota Management in this bucket.
7. Select the checkboxes to define the level on which quota is defined. This selection determines the visibility of the *Day*, *Time slot*, and *Capacity category* sections of the Quota View.
8. Select the checkboxes to define the levels on which quota can be closed. Note that quota can also be closed by work zone.
9. Select the checkboxes to define the level for defining maximum capacity.
10. Settings for Quota definition at the Day, Time slot, and Capacity category levels are covered in [chapter 4](#).
11. Click **OK**.

## Configuring Time Slots

Time slots are fixed time intervals specified by beginning and end times that facilitate activity management.

Time slots can be defined for a specific activity type by defining the time slots when activities of that type can be started. Time slots are also assigned to buckets used in capacity management, defining when quota can be assigned and capacity can be calculated for the bucket.

Time slots are found under **Company Settings** in the drop-down menu.

### Creating a Time Slot

Follow these steps to create a new time slot:

1. Click **Company Settings** and select Time Slots from the drop-down menu.
2. Click **Add New**. The **Add Time Slot** dialog box displays.

**Tip:** If you see a scroll bar displayed, you can scroll down to see more activity types.

3. Complete each field, as needed using the following list:

- **Name:** Using the beginning time–end time format, for example, 8-10 to name the Time Slot.
- **Status:** Select Active or Inactive from the drop-down. ETAdirect assigns appointments, activities, and capacity management to active time slots only. A check mark indicates that the time slot is active.
- **All-day time slot:** Check the box if you want the time slot to last the entire day.
- **Time from:** Type the time that the time slot begins.
- **Time to:** Type the time that the time slot ends.
- **Capacity Categories:** Use the check boxes to add activity types and work skill types.

4. Click **Add**.

## Modifying a Time Slot

To modify time slot:

1. Click **Company Settings** and select Time Slots from the drop-down menu.
2. Click **Modify** in the row of the time slot that you want to modify.

<input type="checkbox"/>	ID	Name †	Time slot label	Status	Time slot	Activity types	Capacity Categories	Actions
<input type="checkbox"/>	1	08-10	08-10	✓	08:00 - 10:00	Add Outlets, Cable Direct Sales, Cable Seasonal, Cable Telemarketing, Cable Upgrade, Disconnect/Transfer, Downgrade, EQ Pick up, HD-DVR Upgrade, HSD / High Speed Data install, HSD Direct Sales, HSD Rewired / Reconnects, HSD Seasonal, HSD SRO, HSD T/C, HSD Telemarketing, HSD Unwired Installs, Maintenance, Multi-type Direct Sales, Multi-type Rewired / Reconnects, Multi-type Seasonal, Multi-type SRO, Multi-type T/C, Multi-type Telemarketing, Multi-type Unwired Installs, Non-pay, Other, PAC Installs, PC Trouble Call, Phone Install/Upgrade, RR Commercial Install/Upgrade, Telephony Direct Sales, Telephony Rewired / Reconnects, Telephony Seasonal, Telephony SRO, Telephony T/C, Telephony Telemarketing, Telephony Unwired Installs, Video Rewired / Reconnects, Video SRO, Video T/C, Video Unwired Installs	Install, Trouble Call, Upgrade	<a href="#">Modify</a>

3. The Edit time slot screen displays.



**Edit time slot**

\* Name: 08-10  
 \* Time slot label: 08-10  
 Status: Active  
 All-day time slot  
 \* Time from: 08 : 00  
 \* Time to: 10 : 00

<input type="checkbox"/>	Status	Activity type
<input checked="" type="checkbox"/>	✓	Add Outlets
<input checked="" type="checkbox"/>	✓	Cable Direct Sales
<input checked="" type="checkbox"/>	✓	Cable Seasonal
<input checked="" type="checkbox"/>	✓	Cable Telemarketing
<input checked="" type="checkbox"/>	✓	Cable Upgrade
<input checked="" type="checkbox"/>	✓	Disconnect/Transfer
<input checked="" type="checkbox"/>	✓	Downgrade
<input checked="" type="checkbox"/>	✓	EQ Pick up
<input checked="" type="checkbox"/>	✓	HD-DVR Upgrade
<input checked="" type="checkbox"/>	✓	HSD / High Speed Data Install

<input type="checkbox"/>	Status	Work skill type
<input type="checkbox"/>	✓	Deinstall
<input type="checkbox"/>	✓	Downgrade
<input checked="" type="checkbox"/>	✓	Install
<input type="checkbox"/>	✓	Non-Pay
<input type="checkbox"/>	✓	Restart/Reconnect
<input type="checkbox"/>	✓	Service Request Order
<input checked="" type="checkbox"/>	✓	Trouble Call
<input checked="" type="checkbox"/>	✓	Upgrade

Buttons: Cancel, Update

4. Change the values and then click **Update**.

### Activating and Deactivating Time Slots

Activating a time slot makes it available for use in other areas of the system. Deactivating a time slot hides it from all other areas in the ETAdirect system.

Follow these steps to activate or deactivate a time slot:

1. Click **Company Settings** and select Time Slots from the drop-down menu.
2. Check the box next to the time slot or that you want to activate.
3. Click either **Activate** or **Deactivate**.

ETAdirect Dispatch - Demo Configuration - Tools - Resource Settings - Reports - Company S...

Time Slots View Add New

With 4 selected: Activate Deactivate

<input type="checkbox"/>	ID	Name ↑	Time slot label	Status	Time slot	Activity types
<input checked="" type="checkbox"/>	1	08-10	08-10	✓	08:00 - 10:00	Add Outlets, Cable Direct Sales, Cable Seasonal, Cable Telemarketing, Downgrade, EQ Pick up, HD-DVR Upgrade, HSD / High Speed Data ins / Reconnects, HSD Seasonal, HSD SRO, HSD T/C, HSD Telemarketing Multi-type Direct Sales, Multi-type Rewired / Reconnects, Multi-type S T/C, Multi-type Telemarketing, Multi-type Unwired Installs, Non-pay, O Phone Install/Upgrade, RR Commercial Install/Upgrade, Telephony [ Reconnects, Telephony Seasonal, Telephony SRO, Telephony T/C, T Unwired Installs, Video Rewired / Reconnects, Video SRO, Vide
<input checked="" type="checkbox"/>	2	10-12	10-12	✓	10:00 - 12:00	Add Outlets, Cable Direct Sales, Cable Seasonal, Cable Telemarketing, Downgrade, EQ Pick up, HD-DVR Upgrade, HSD / High Speed Data ins / Reconnects, HSD Seasonal, HSD SRO, HSD T/C, HSD Telemarketing Multi-type Direct Sales, Multi-type Rewired / Reconnects, Multi-type S T/C, Multi-type Telemarketing, Multi-type Unwired Installs, Non-pay, O Phone Install/Upgrade, RR Commercial Install/Upgrade, Telephony [ Reconnects, Telephony Seasonal, Telephony SRO, Telephony T/C, T Unwired Installs, Video Rewired / Reconnects, Video SRO, Vide
<input checked="" type="checkbox"/>	3	13-15	13-15	✓	13:00 - 15:00	Add Outlets, Cable Direct Sales, Cable Seasonal, Cable Telemarketing, Downgrade, EQ Pick up, HD-DVR Upgrade, HSD / High Speed Data ins / Reconnects, HSD Seasonal, HSD SRO, HSD T/C, HSD Telemarketing Multi-type Direct Sales, Multi-type Rewired / Reconnects, Multi-type S T/C, Multi-type Telemarketing, Multi-type Unwired Installs, Non-pay, O Phone Install/Upgrade, RR Commercial Install/Upgrade, Telephony [ Reconnects, Telephony Seasonal, Telephony SRO, Telephony T/C, T Unwired Installs, Video Rewired / Reconnects, Video SRO, Vide
<input type="checkbox"/>						Add Outlets, Cable Direct Sales, Cable Seasonal, Cable Telemarketing, Downgrade, EQ Pick up, HD-DVR Upgrade, HSD / High Speed Data ins

## Configuring Major and Critical Capacity Usage

When used capacity reaches major or critical usage levels, it displays in a different color on the quota matrix.

These levels can be configured by going to Company Settings > Display > Quota Settings

The screenshot shows the 'Quota settings' configuration page. It includes three main sections: 'Major Capacity Usage' with a value of 90, 'Critical Capacity Usage' with a value of 98, and a 'Show Planning' checkbox which is checked.

If Used capacity is less than Major Capacity Usage, then capacity is shown in green color.

If Used capacity is more than Major Capacity Usage but less than Critical Capacity Usage, then capacity is shown in brown color.

If Used capacity is more than Critical Capacity Usage but less than Quota value, then capacity is shown in orange color.

If Used capacity is more than Quota value, then capacity is shown in red color.

Capacity bucket	Time slot Capacity categories	Wednesday, November 6th, 2013					
		% Quota	Quota	Used	Used quota %	Status	Close time
Planning	08-10	100%	15354	11582	75.43%	✓	
	Install	50%	7677	723	9.42%	✗	20:30
	Trouble Call	25%	3838	636	16.57%	✓	
	Upgrade	25%	3838	10223	266.36%	✓	21:30*
	<b>Total</b>			<b>15353</b>	<b>11582</b>		

## Defining Units of Measurement for Quota

ETAdirect supports the option of choosing the units of measurement to display Quota/Used values.

Define the units of measurement for Quota by going to the Quota management section under **Company Settings > Business Rules**.

The screenshot shows the 'Quota management' configuration page. It features a dropdown menu for 'Quota and available capacity are defined in' with options: 'man-days', 'hours', 'man-days', and 'minutes'. Below it, there is a text input field for 'Number of hours per man day is' with the value '7' entered.

This section allows setting the unit of measurement for quota and capacity. There are three possible options – hours, man-days and minutes. Internally, all values are calculated in minutes anyway, and are converted to the selected unit when the corresponding value is displayed in the Quota View.

When man-days is selected as the unit of measurement, the *Number of hours per man day is* field appears where the correlation between man-days and hours can be defined. This parameter is used to convert man-hours into minutes.

## Adjusting Available Capacity

Quota that is defined as a percentage of capacity must be recalculated regularly to account for changes in resource allocation, work skills and other variables.

To perform the adjustment the system should estimate the capacity available by calendar, process the already booked activities, and recalculate the *Quota in minutes* using the defined percentage value. Quota recalculation is a complex operation and, therefore, it should be performed only once in a predefined time interval. The interval can be defined as the *Available capacity is automatically recalculated every \_\_ minutes* parameter under **Company Settings > Business Rules**.

Quota management	Quota and available capacity are defined in <input type="text" value="minutes"/> .
	Available capacity is automatically recalculated every <input type="text" value="10"/> minutes for <input type="text" value="3"/> <input type="text" value="calendar weeks"/> in advance starting from <input type="text" value="current day"/> .

The recalculation interval in minutes can be defined in the range of 5 to 1,440. By default, it is set to 10 minutes.

The quota and capacity are recalculated for a predefined future period. The period is defined as the number of days or calendar weeks. The maximum value is 74 days or 12 calendar weeks. The recalculation start day can be selected to current day, tomorrow, and day after tomorrow.

The calendar week option is processed according to the *Week starts on* parameter. If the recalculation period is set to 1 calendar week, the recalculation will be performed for all remaining days of the current week (unless the start day is the week start day) plus all days of the following week. On the contrary, if the recalculation period is set to 7 days, the recalculation will be performed for exactly 7 days.

Here are some examples where Quota recalculation is necessary:

- New technicians creation
- Technicians move between capacity buckets (sub-buckets can also be moved)
- Technicians activation/deactivation
- Resource tree reorganization (directly in the database) during a product upgrade or an implementation package installation
- Change of the set of technician's work skills
- Change of the content of an already used work skill group
- Change of the set of work skills within a capacity category



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# Chapter

# 3

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## Managing Capacity and Quota

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### Topics:

- [Viewing Quota in the Matrix](#)
- [Comparing Projected Quota to Actual Quota](#)
- [Adding Quota Manually](#)
- [Adding Quota Automatically](#)

ETAdirect supports managing Quota at a very granular level of Time Slot and Capacity Category. For users who are upgrading from earlier versions of ETAdirect or those who have stable workforces and limited time slots and capacity categories, this chapter will review how to configure and manage Quota within ETAdirect. For users with fluctuation workforces or complex daily Quota calculations, new capabilities in ETAdirect, which are covered in Chapter 4, may improve operational efficiency.

In ETAdirect, the following formula defines the relationship between capacity and quota:

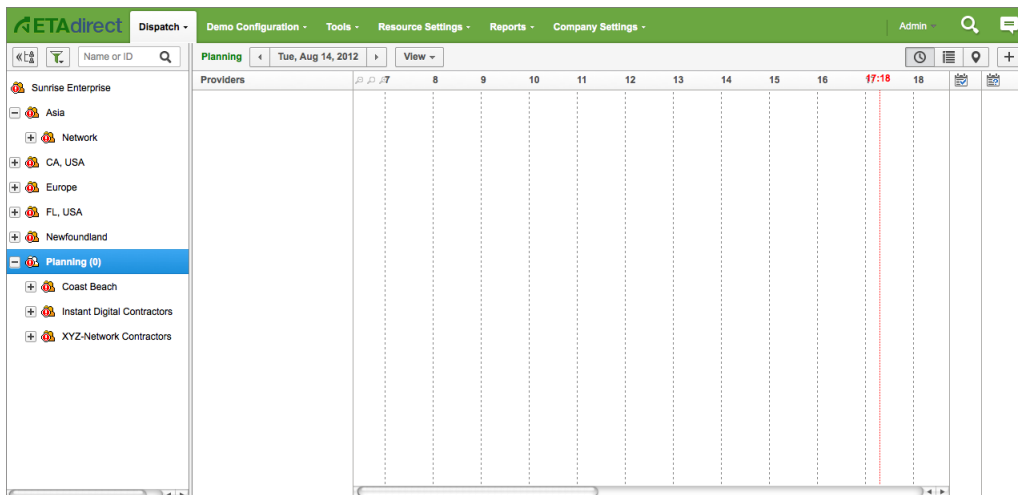
$$\text{Capacity} = \text{Quota} - \text{Used}$$

- **Capacity:** Capacity is the amount of available time in man-minutes based on the availability of the resources in the capacity bucket. This value is reflected in the Estimation field in the quota matrix.
- **Quota:** Quota is the company's planned use of capacity, allocated across the different capacity categories and time slots for the best and most economic scenario.
- **Used:** The minutes scheduled for any activity that has been booked for that day are considered "used".

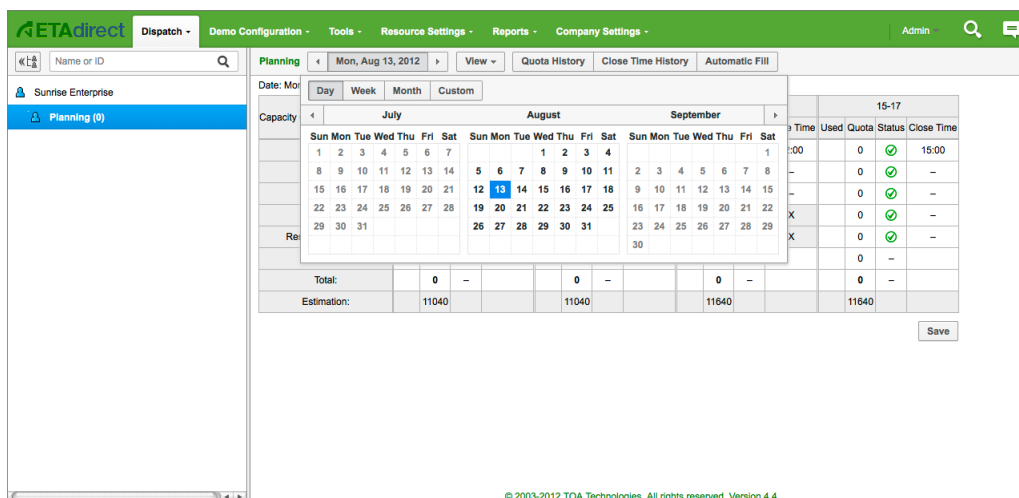
## Viewing Quota in the Matrix

Follow these steps to view the quota matrix:

1. In the **Resource Tree**, select the bucket for which you have target for quota for.



2. Click **Dispatch** and then select **Quota** from the drop-down menu
3. On the calendar, select **Day** and choose the date that you want to display.



The quota matrix is made up of the capacity categories and time slots identified when setting up the bucket for capacity management. The matrix will organize the capacity categories and time slots in different orientations based on the number of days selected.

When a single day is selected, the matrix displays the time slots across the top of the matrix and the capacity categories down the left column, as shown in the example below.

Planning < Mon, Aug 13, 2012 > View Quota History Close Time History Automatic Fill

Date: Mon, Aug 13th, 2012

Capacity Categories / Time slot	08-10				10-12				13-15				15-17			
	Used	Quota	Status	Close Time	Used	Quota	Status	Close Time	Used	Quota	Status	Close Time	Used	Quota	Status	Close Time
Install	0	0	✓	07:00	0	0	✓	10:00	0	0	✓	12:00	0	0	✓	15:00
Trouble Call	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
Upgrade	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
Deinstall	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Restart/Reconnect	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Reserved:	0	-			0	-			0	-			0	-		
Total:	0	-			0	-			0	-			0	-		
Estimation:	11040				11040				11640				11640			

Save

When either multiple days or week is selected, the matrix displays the dates across the top with the capacity categories grouped within each time slot in the two left columns.

Planning < Mon, Aug 13 - Sun, Aug 19 > View Quota History Close Time History Automatic Fill

Time slot	Capacity Categories / Date	Mon, Aug 13th, 2012				Tue, Aug 14th, 2012				Wed, Aug 15th, 2012				Thu, Aug 16th, 2012				Fri, Aug 17th, 2012			
		Used	Quota	Status	Close Time	Used	Quota	Status	Close Time	Used	Quota	Status	Close Time	Used	Quota	Status	Close Time	Used	Quota	Status	Close Time
08-10	Install	0	0	✓	07:00	0	0	✓	07:00	0	0	✓	07:00	0	0	✓	07:00	0	0	✓	07:00
	Trouble Call	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
	Upgrade	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
	Reserved:	0	-			0	-			0	-			0	-			0	-		
	Total:	0	-			0	-			0	-			0	-			0	-		
	Estimation:	11040				11040				11040				11040				11040			
10-12	Install	0	0	✓	10:00	0	0	✓	10:00	0	0	✓	10:00	0	0	✓	10:00	0	0	✓	10:00
	Trouble Call	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
	Upgrade	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
	Reserved:	0	-			0	-			0	-			0	-			0	-		
	Total:	0	-			0	-			0	-			0	-			0	-		
	Estimation:	11040				11040				11040				11040				11040			
13-15	Install	0	0	✓	12:00	0	0	✓	12:00	0	0	✓	12:00	0	0	✓	12:00	0	0	✓	12:00
	Trouble Call	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-
	Upgrade	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-	0	0	✓	-

Save

## Comparing Projected Quota to Actual Quota

You can review actual quota used for that day against your projected quota. ETAdirect provides a color-coded display to make the data easier to interpret.

Follow these steps to compare projected quota to actual quota:

1. Select the day that you want to investigate.
2. Use the following key to interpret the colors that you see:
  - **Green values** indicate that there is still sufficient quota available.
  - **Brown values** indicate that quota is above major capacity usage but below critical capacity usage.
  - **Orange values** indicate that quota is above critical capacity usage but below 100% of your projected quota.
  - **Red values** indicate that actual quota is above 100% of your projected quota.



**Note:** The quota levels for the different color codes are defined on the display screen under **Company Settings**.

## Identifying Changed Values

When making changes within the quota matrix, the system identifies changes by placing an orange triangle in the upper right corner of each field that has changed.

Daily Routing Quota Dashboard Resource Settings					
Planning < Wed, Jul 18 - Tue, Jul 24 > View Q					
Wed 18 Jul 2012					
Time slot	Capacity Categories / Date	Used	Quota	Status	Close Time
08-10	Install	723	800	✘	-
	Trouble Call	636	900	✔	-
	Upgrade	10223	12909	✔	-
	Reserved:		0	-	-
	Total:	11582	14609	-	-
	Estimation:		11280		

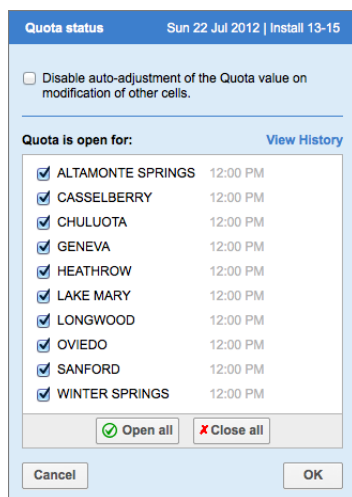
If you hover over the triangle, the original value displays in a small pop-up window. You can also view changes in the Quota History report. See [Viewing Quota History](#) on page 56 for more information.

## Closing Quota Manually

When you close quota for a capacity category, you prevent the appointment booking system from booking appointments in that category, even if there is capacity available.

Follow these steps to close quota manually:

1. On the Quota screen, click in the Status field for the capacity category that you want to close.



2. The Quota Status screen displays.
3. Follow these steps to close quota for all of the work zones, click the Close All button. Follow these steps to close quota for some of the work zones, click the check boxes next to the areas and then click **OK**.
4. In the Quota screen, click **Save**.

## Closing Quota Automatically at a Certain Time

When you close quota for a capacity category, you prevent the appointment booking system from booking appointments in that category, even if there is capacity available.

You might use this feature to automatically block appointments in a dangerous area of town late at night, or to automatically block appointments during the morning and afternoon hours in an area where there are lots of schools.



Follow these steps to automatically close quota at a certain time:

1. In the Quota screen, click the Close Time field next to the capacity category that you want to close. The Close Time screen displays.

2. Follow these steps to close quota for all of the work zones at the same time, select the time in the **Close quota automatically**.
3. Follow these steps to close quota for some of the work zones, or to close quota at different times for different work zones, select the times in the fields next to the areas Click **OK**.
4. In the Quota screen, click **Save**.

### Customizing the Way Quota is Displayed

You can change the columns in the quota matrix. For example, many organizations use percentages to define quota distribution.

By default, quota distribution displays in minutes, but you can also display percentages. You can choose to display the columns that are most helpful for your daily work.

Follow these steps to show or hide columns:

1. Click the View button at the top of the matrix menu.

Time slot	Capacity Categories / Date	Wed, Jul 18th, 2012	Thu, Jul 19th, 2012	Fri, Jul 20th, 2012	Sat, Jul 21st, 2012	Sun, Jul 22nd, 2012	Mon, Jul 23rd, 2012	Tue, Jul 24th, 2012
08-10	Install	723	900	606		900	900	900
	Trouble Call	636	900	966		900	900	900
	Upgrade	10223	12909	780		12909	12909	12909
	Reserved:		0			0	0	0
	Total:	11582	14709	938		14709	14709	14709
	Estimation:		11280			11040	11040	11040
10-12	Install	895	900	966		900	900	900
	Trouble Call	1895	1900	261		1900	1900	1900
	Upgrade	5511	6000	566		6000	6000	6000
	Reserved:		0		0	0	0	0
	Total:	8301	8800	9247	8800	8800	8800	8800
	Estimation:		11280		11040	11040	11040	11040

2. Check the box next to the columns that you want to display:
3. Click Apply.

- Show Percent Used displays the quota consumed as a percent of total quota for the time slot.
- Show Used displays the consumption of quota in number of minutes.
- Show Percent Quota displays the quota for that capacity category as a percentage of the quota allocated for the time slot.
- Show Quota displays the quota for that capacity category in minutes.
- Show Status displays whether the capacity category is open or closed.
- Show Close Time displays the time that the capacity category closes.
- Show Plans displays the forecasted capacity for the capacity category.

## Filtering the Quota Matrix by Capacity Category

To filter on a specific capacity category follow these steps:

1. Click Filter above the quota matrix.

2. Select the category that you want to filter on from the category drop-down menu.

3. Click Apply. The quota information for the selected category displays. All other information is hidden.

## Filtering the Quota Matrix by Time Slot

Follow these steps to filter on a specific time slot:

1. Click Filter above the quota matrix.

Category  
\*

Time slot  
\*

Show Percent Used

Show Used

Show Percent Quota

Show Quota

Show Status

Show Close Time

Show plans

Apply

2. Select the category that you want to filter from the Time Slot drop-menu..

Category  
\*

Time slot  
\*

08-10

10-12

13-15

15-17

Show Quota

Show Status

Show Close Time

Show plans

Apply

3. Click Apply. The quota information for the selected category displays. All other information is hidden.

## Adding Quota Manually

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If quota has been configured to be entered as minutes, you can add quota to the quota matrix by typing it directly into the matrix.

You can type values into any field in the Quota column. These are the fields that contain the quota for the individual capacity categories and the total quota for the entire time slot. ETAdirect updates all of the other fields.

### Automatic Quota Adjustments

By default, ETAdirect automatically updates the fields that are linked to any field that you update.

For example, when you update the quota for a single capacity category, ETAdirect automatically updates the total quota for that time slot.

The way that ETAdirect calculates the values to update the matrix depends on the situation. The following describe the actions required to update quota and for the result of the actions:

Change quota for an Individual capacity category

- Updates the individual capacity category quota.

- Updates the total quota for that time slot.

Change quota for an entire time slot

- Updates the total quota for the time slot.
- Updates all of the individual capacity categories in the time slot. The new quota is divided among the capacity categories according to the Percent Quota value.

**Add** quota to an empty time slot

- Updates the total quota for the time slot.
- Updates all of the individual capacity categories in the time slot. The quota is divided evenly among the individual capacity categories in the time slot.


**Add** quota to an empty capacity category

- Updates the individual capacity category quota.
- Updates the total quota.

## Adding Quota Automatically

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The Mass populate feature enables you to use historical data to create future quota.

 **Note:** Mass populate has replaced the previously existing *Automatic fill* functionality.

You can either use the quota that ETAdirect projected or the quota that you actually used. The date that the historical data is copied from is called the source date and the future dates that you want to copy the data to are called the target dates.

ETAdirect provides several ways to add quota automatically. In all cases, you can copy either the quota that you allocated for that date, or the actual minutes used on that date. [Mass Populate Functionality](#) on page 51 is covered more extensively in chapter 4.

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# Chapter

# 4

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## Using Capacity-based Quota Management

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### Topics:

- [Configuring the Capacity Bucket](#)
- [Viewing the Quota Management Matrix](#)
- [Setting Multi-Bucket Mode](#)
- [Mass Populate Functionality](#)

Capacity Management ensures that a company has sufficient resources in the field to match the anticipated volume and level of work. Quota Management allocates the work across available work skills and time slots. Capacity-based Quota Management provides a flexible tool for managing quota and responding to changes in available capacity.

In earlier versions of SmartCapacity, users managed quota changes by adding new information to the matrix manually. In version 4.5, the system will update quota automatically based on resource changes as they affect quota at the Day, Time Slot and/or Capacity Category level. Previous versions defined quota as a fixed value expressed in minutes. SmartCapacity 4.5 defines quota as a percent of capacity. This means that your quota updates automatically in response to workforce changes. Since capacity is updated automatically, time slots and capacity categories are added without user data entry, thus diminishing *human errors* that cause over or under estimations of available capacity.

### Capacity-based Quota Management:

- Updates quota automatically in response to changes in workforce capacity.
- Manages quota by your choice of day, time slot or capacity category.
- Guides users through a menu of configuration choices to meet the company's needs.

## Configuring the Capacity Bucket

Enable *Quota management* in a bucket's **Resource and Bucket Info** screen to include it in Quota management. The configure a capacity bucket to manage the additional settings introduced in SmartCapacity 4.5. Define the levels of Quota that will be addressed in this particular bucket.

Configure capacity buckets based on company policies. Configuration choices affect the layout of the *Quota grid* on the **Quota** screen

1. Check the *Quota Management* box to enable Quota Management for this bucket and add management information to your Quota matrix.
2. Select the *Time Slots* that will be used for Quota Management in this bucket.
3. Select the *Capacity Categories* that will be used for Quota Management in this bucket.
4. Check the levels at which quota is defined in this bucket (i.e., day, time slot, capacity category). This determines the visibility of the *Day*, *Time slot*, and *Capacity category* tables in the Quota view
5. Check the levels on which quota can be closed in this bucket. Note that quota can also be closed by work zone.
6. Check the levels for which maximum capacity should be estimated. Maximum capacity is the maximum number of minutes for activities booking. ETAdirect checks that the total duration of booked activities plus the total duration of other activities does not exceed maximum capacity

## Configuring the Day Level

The capacity bucket can be configured to calculate quota at the day level. This option is useful for businesses where capacity fluctuates based on the day of the week, such as installs increasing on weekends and Mondays while trouble calls increase on other days of the week.

### To configure capacity at the day level:

1. Select the mode for entering quota:
  - If *in minutes* is selected, then manually enter Quota as the number of minutes to be used for activities booking.
  - If *as % of capacity available by calendar* is selected, then enter the percentage of the total available capacity to be used for activities booking, and the Quota value, in minutes, will be calculated automatically.
2. Other Activities:

- Check the *Estimate capacity used by activities that are not a part of the Quota Management* box if you want to calculate the capacity used by activities that are not part of Quota Management. This includes activities such as lunch or team meetings.
- If the above checkbox is selected, check the *Subtract these activities from the maximum capacity of this day before calculation of quota* box for capacity for these *other activities* to be subtracted before quota is calculated.

## Configuring the Time Slot Level

The capacity bucket can be configured to calculate capacity at the Time Slot level. Use this option if your business is focused on allocation of work types for specific times of the day. Such as a morning focus on customers waiting

### To configure quota at the Time Slot level:

#### 1. Select the mode for entering quota:

- If *in minutes* is selected, then manually enter Quota as the number of minutes to be used for activities booking.
- If *as % of the maximum time slot capacity* is selected, then quota is defined as a percentage of the maximum capacity at the time slot level. Enter the required percentage, and the quota will be calculated automatically. The option is only available if the maximum capacity is estimated on this level.
- If *as % of the daily quota* is selected, then quota at the time slot level is calculated as percentage of the quota defined at the day level. Enter the required percentage, and the quota for each time slot will be calculated automatically. This option is only visible if the day level quota checkbox was selected when [Configuring the Capacity Bucket](#).

#### 2. Other Activities:

- Check the *Estimate capacity used by activities that might affect capacity in this time slot* box if you want to calculate the capacity used by activities that are not part of Quota Management. This includes activities such as lunch or team meetings.
- The *Subtract these activities from the maximum time slot capacity before calculation of quota* checkbox is only visible if you have chosen to enter Quota as *% of the maximum time slot capacity* above. Select this box to indicate that you want the capacity for these *other activities* subtracted before the maximum capacity is calculated.

#### 3. Select the *Automatically adjust \"% Quota\" values to keep their total equal to 100%* checkbox to define if the total sum of the % Quota values should always be equal to 100%. It is only visible if the *as % of the daily quota* option is selected above. When this option is selected, changes to the % Quota value of any time slot will cause the % Quota values for other time slots to change proportionally, so that their sum is always equal to 100%.

#### 4. The *Allow to close based on % of the daily quota that is currently in use* checkbox defines whether the system should allow stopping booking activities belonging to the selected time slot on the basis of the percentage of the daily quota that is currently in use. This restriction works in addition to the quota. This option is only visible if the day level quota checkbox was selected when [Configuring the Capacity Bucket](#).

## Configuring the Capacity Category Level

The Capacity Bucket can be configured by Capacity Category. This is the standard capacity configuration in use by most customers.

To configure capacity at the Capacity Category level:

### 1. Select the method used to define quota:

- If *in minutes* is selected, then manually enter Quota as the number of minutes to be used for activities booking.
- If *as % of the maximum capacity available in this category* is selected, then quota is defined as a percentage of the maximum capacity at the capacity category level. Enter the required percentage, and the quota will be calculated automatically. The option is only available if the maximum capacity is estimated on this level.
- If *as % of the time slot quota* is selected, then quota at the capacity category level is calculated as a percentage of the quota defined at the time slot. Enter the required percentage, and the quota for each time slot will be calculated automatically. This option is only visible when the time slot level quota is in use.

### 2. Estimating Quota based on historical data:

- Check the *Estimate quota based on historical data* box to indicate whether quota should be estimated based on historical data. This option displays only if quota is defined *as % of the time slot quota*.
  - Select the Historical values to be used. Values can be based on *Quota %* or by *Used Quota %*.
  - Choose the length of the historical period to be analyzed. Period can be set by *one week*, *one month*, or *two months*.

### 3. Select the *Automatically adjust % Quota values to keep their total equal to 100%* checkbox if the total sum of the % Quota values should always be equal to 100%. This checkbox is only visible if the *as % of the time slot quota* option is selected above. When this option is selected, changes to the % Quota value of any capacity category will cause the % Quota values for other capacity categories to change proportionally, so that their sum is always equal to 100%.

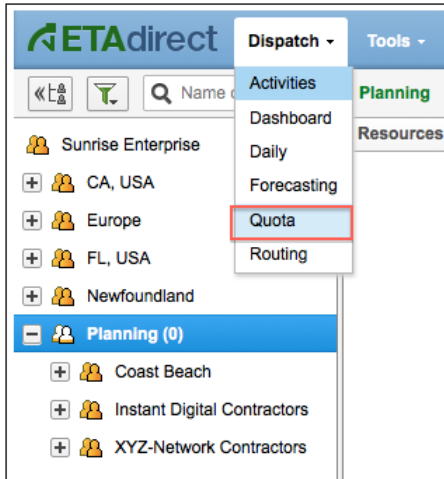
### 4. The *Allow to close based on % of the daily quota that is currently in use* checkbox defines whether the system should allow stopping booking activities belonging to the selected capacity categories on the basis of the percentage of the daily quota that is currently in use. This restriction works in addition to the quota. It is only visible if the time slot level quota checkbox was selected when [Configuring the Capacity Bucket](#).

## Viewing the Quota Management Matrix

In earlier versions of SmartCapacity, users had to manage quota changes by adding new information to the matrix, either manually or automatically. In version 4.5, the system will update quota automatically based on resource changes as they affect quota at the Day, Time Slot and/or Capacity Category level. Quota and capacity levels display side by side in the Quota Management matrix.

Quota management functionality can be accessed by selecting **Quota** in the **Dispatch** main menu item.





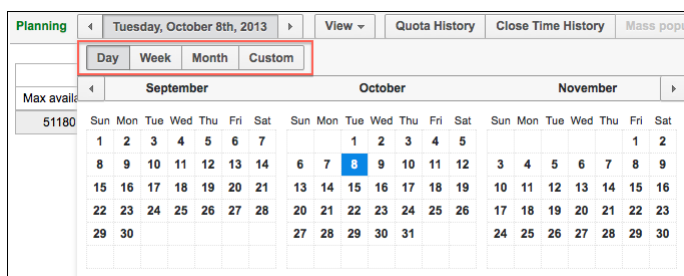
The Quota screen includes the Resource Tree and the Quota grid

Planning		Tuesday, October 29th, 2013		View		Quota History		Close Time History		Mass populate		Day	Time Slot	Capacity Category
Sunrise Enterprise		Tuesday, October 29th, 2013												
Planning (0)		Time Slot	Capacity Categories	Max available	Other activities	% Quota	Min quota	Quota	Booked activities	Used	Used quota %	% to stop booking at	Status	Close time
		08-10		11040	1	15%		7668	213	11582	151.04%		✗	04:30 AM
		Install		10440		5.82%		446	18	723	162.11%		✗	07 AM
		Service Request Order		10440									✓	
		Trouble Call		10440		5.82%		446	17	636	142.6%	83%	✓	
		Upgrade		11040		88.36%		6775	178	10223	150.89%		✓	
		<b>Total</b>		<b>42360</b>				<b>7667</b>	<b>213</b>	<b>11582</b>				
		10-12		11040	13	25%		12780	191	8465	66.24%	80%	✓	
		Install		10440		35%		4473	20	895	20.01%		✗	10 AM
		Trouble Call		10440		25%		3195	48	1895	59.31%		✗	12:30 AM
		Upgrade		11040		40%		5112	120	5511	107.81%		✓	
		<b>Total</b>		<b>31920</b>				<b>12780</b>	<b>188</b>	<b>8301</b>				
		13-15		11640	20	35%		17892	237	12923	72.23%		✓	
		Install		11040		40%		7156	44	2276	31.81%		✗	12 PM
		Trouble Call		11040		25%		4473	86	4733	105.81%		✓	
		Upgrade		11640		35%		6262	77	4057	64.79%		✓	
		<b>Total</b>		<b>33720</b>				<b>17891</b>	<b>207</b>	<b>11066</b>				

In earlier versions of SmartCapacity, users had to manage quota changes by adding new information to the matrix, either manually or automatically. In version 4.5, the system will update quota automatically based on resource changes as they affect quota at the Day, Time Slot and/or Capacity Category level.

### Selecting the Date Range for the Quota View

Select the period for which Quota is to be displayed and managed by selecting the Calendar at the top of the screen. The calendar in the offers four options to view the Quotas – Day, Week, Month and Custom.



Choose Day, Week or Month to display and manage Quota for the selected day, week or month, respectively, starting from the date selected in the calendar. The Custom option allows you to select and view individual days in the calendar. For example, if the company situation requires quota processing for Mondays and Thursdays only or for the first 10 days of a month, this can be achieved by using the Custom calendar option. When the Custom option is activated, the days are selected by clicking the dates directly in the calendar. At the same time the Quota screen displays the quota values at the selected level (day, time slot or capacity category).

## Viewing Capacity at Various Levels

Because of the amount of information that can be displayed at each capacity level, SmartCapacity 4.5 provides separate easy-to-read tables for the day, time slot and capacity category levels.

Select the level you're most interested in by clicking one of the buttons in the upper right corner of the data matrix.

Used quota %	% to stop booking at	Status	Close time
80.33%		✓	07 AM
70.67%		✗	
79.19%		✓	

### Viewing the Day Quota:

Max available	Other activities	% Quota	Min quota	Quota	Booked activities	Used	Used quota %	Status	Close time
51180		86%	43265	43285	711	36148	85.55%	✓	03:30 PM

The Day Quota table provides an overview of capacity on a single day that you select from the calendar. This table gives you the information you need to restrict the Used value so that it does not exceed the workforce available on that day.

### Viewing the Time Slot Quota

Time Slot	Max available	Other activities	% Quota	Min quota	Quota	Booked activities	Used	Used quota %	% to stop booking at	Status	Close time
Day	51180		79%	60743	60743	712	36283	69.73%		✓	
08-10	11040		56%	14790	14790	200	9580	64.77%		✓	
10-12	11040					190	9008			✓	
12-15	11040					235	12564			✓	
15-17	11040					70	3088			✓	
Total	45260			14799	695	35430	87.12%				

The Time Slot Quota table provides an overview of capacity for the day so that you can restrict the capacity for particular time slots.

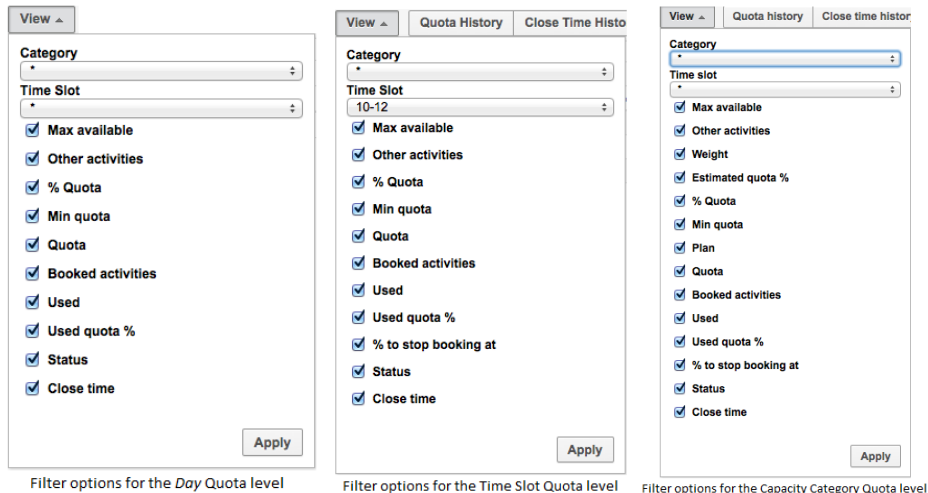
### Viewing the Capacity Category Quota

Capacity Category	Max available	Other activities	% Quota	Estimated quota %	% Quota	Min quota	Quota	Booked activities	Used	Used quota %	% to stop booking at	Status	Close time
Day	21800		93.2%	8.81%	93.2%			191	8468			✓	11:48
Basic	10400		30.1%	29.96%	21.69%			48	1896			✗	12:30 AM
Travel Call	10400		80.23%	81.23%	80.18%			120	5811			✓	
Upgrade	10400							23	861			✓	
Total	21800							191	8468				

The Capacity Category table combines dates and time-slots. This is the category currently in use by many customers. A bucket must be assigned capacity categories for Quota management.

## Viewing Quota Parameters

The settings chosen while *Configuring the Capacity Bucket* determine the visibility of the quota matrix. You can further filter the contents of the quota grid by selecting the desired elements in the *View* window. The checkboxes define which columns to display in the Quota grid. However, the list of available columns varies depending on the selected method of quota definition and other capacity bucket settings. The filter contains only the columns relevant to the selected method and configuration.



The following is a list of all Quota parameters available in the Quota grid:

- 1. Max available:** The maximum capacity available by the calendar which is calculated as the sum of the technicians' working time in the selected capacity bucket for the selected day, time slot and/or capacity category. This value serves as the base for quota when quota is defined as percentage of the available capacity. The Max available value is recalculated on a periodical basis according to the settings in *Business rules*.
  - Day Quota table: The Max available column is hidden when *Estimate maximum capacity for* is disabled at the day level in the capacity bucket configuration.
  - Time Slot Quota table: The Max available column is hidden when *Estimate maximum capacity for* is disabled both at the day and time slot level in the capacity bucket configuration. If this option is disabled at the time slot level only, then the Max available column is visible, but its values are not calculated.
  - Capacity Category Quota table: The Max available column is hidden when *Estimate maximum capacity for* is disabled both at the time slot and capacity category level in the capacity bucket configuration. If this option is disabled at the capacity category level only, then the Max available column is visible, but its values are not calculated.
- 2. Other activities:** The capacity allocated to activities that are not part of capacity management (mass, repeating and shift activities). The Other activities value is recalculated on a periodical basis according to the settings in *Business rules*.
  - Day Quota table: The Other activities column is only shown when the *Estimate capacity used by activities that are not a part of the Quota Management* is set in the capacity bucket configuration.
  - Time Slot Quota table: The Other activities column is shown when the *Estimate capacity used by activities that might affect capacity in this time slot* is set at the day and time slot level in the capacity bucket configuration, otherwise it is hidden. However, if this option is disabled only the time slot level, then the column is visible but its values are not calculated.
- 3. Weight:** Weight of the selected capacity category calculated on the basis of historical data. This column is visible when the *Estimate quota based on historical data* option is enabled at the capacity category level. The weight value is represented as percentage. Depending on the capacity bucket configuration, the weight is calculated as the relation of either % Quota or Used quota % to the Max available value on the same weekday(s) in the past for the selected period (one week, one month or two months). Weight is used as a prediction tool to calculate

the Estimated quota % value based on historical data. This column is only visible when viewing the Capacity Category Quota table.

4. **Estimated Quota %:** Percentage of the time slot quota expected to be allocated for booking of activities having the selected capacity category. This value is calculated as the product of Weight and the Max available value for the selected capacity category and time slot. Estimated quota % is quota forecast calculated on the basis of historical data (quota used or set for the same weekday(s) in the historical period of one week, one month or two months). The Estimated quota % value is used for information and reference in determining quota for future periods. This column is only visible when viewing the Capacity Category Quota table.
5. **% Quota:**
  - Day Quota table: Percentage of the maximum capacity available for activities booking. Enter the % Quota value manually. The % Quota column is only visible when Quota is entered parameter is set to *as % of capacity available by calendar* in the capacity bucket configuration. % Quota affects the value of the Quota column.
  - Time Slot Quota table: Percentage of the day or time slot quota available for booking of activities in the selected time slot. When quota is entered in minutes, the % Quota value is non-editable and is calculated as a percentage of the total quota allocated to a time slot. The percentage is adjusted in proportion to the quota values, so that the total sum of all time slots is 100%. When quota is entered *as % of the maximum time slot capacity*, enter the % Quota value. This value affects the Quota value which is calculated as the percentage of the Max available value for the selected time slot. When quota is entered *as % of the daily quota*, enter the % Quota value. This value affects the Quota value which is calculated as the percentage of the Quota value for the day.
  - Capacity Category Quota table: Percentage of the time slot or capacity category quota available for booking of activities in the selected capacity category. When quota is entered in minutes, the % Quota value is non-editable and is calculated as a percentage of the time slot quota allocated to a capacity category on the basis of the number of minutes entered in the Quota column. The percentage is adjusted in proportion to the quota values, so that the total sum of all time slots is 100%. When quota is entered *as % of the maximum capacity available in this category*, enter the % Quota value. This value affects the Quota value which is calculated as the percentage of the Max available value for the selected capacity category and time slot. When quota is entered *as % of time slot quota*, enter the % Quota value. This value affects the Quota value which is calculated as the percentage of the Quota value for the time slot.
6. **Min Quota:** Enter the minimum allowed value of the quota, manually. The Min quota parameter is only used when quota is defined as percentage of capacity and is intended for situations when the calculated quota value might be less than the duration of a single activity. In this case, the Min quota value is used instead of the calculated quota value, as otherwise quota calculation has no practical purpose.
  - Day Quota table: The Min quota column is only visible when Quota is entered parameter is set to *as % of capacity available by calendar* in the capacity bucket configuration.
  - Time Slot Quota table: The Min quota column is only visible when Quota is entered parameter is set to *as % of the maximum time slot capacity* or *as % of the daily quota* in the capacity bucket configuration.
  - Capacity Category Quota table: The Min quota column is only visible when Quota is entered parameter is set to *as % of the maximum capacity available in this category* or *as % of time slot quota* in the capacity bucket configuration.
7. **Plan:** Values taken from the Forecasting screen, when the Plan is calculated in Forecasting and *Show Plan Column* is enabled in the Display screen. See the SmartForecasting user guide for more information about the Plan. This column only appears in the Capacity Category Quota table.
8. **Quota:**
  - Day Quota table: The quota for activities booking on the selected day which can be either entered manually or calculated as percentage of the available capacity. Depending on the settings of the *Quota is entered* parameter in the capacity bucket configuration, the Quota cell can be editable (when quota is entered in minutes) or non-editable (when quota is entered as % of capacity available by calendar).

Depending on the methods of quota definition, the following cases are possible

Quota entered in minutes (manually):

Wednesday, October 16th, 2013					
Max available	Other activities	Quota	Booked activities	Used	Used quota %
51180	60	49220	712	36283	73.72%

Quota cell is editable and Quota is entered in minutes. The Max available and Other activities values do not affect the Quota value directly.

Quota entered as % of capacity available by calendar:

Wednesday, October 16th, 2013					
Max available	Other activities	% Quota	Min quota	Quota	Booked activities
51180	60	100%		51120	712

In this case, enter the % Quota, and the Quota value will be calculated automatically. The Quota cell is non-editable. In this example the *Subtract these activities [other activities] from the maximum capacity of this day before calculation of quota* option is enabled, and the Other activities value is subtracted from Max available resulting in 100% quota of 51120.

- Time Slot Quota table: The quota for booking of activities having the selected time slot. Depending on the settings of the *Quota is entered* parameter in the capacity bucket configuration, the Quota cell can be editable (when quota is entered in minutes) or non-editable (when quota is entered as % of the maximum time slot capacity, or as % of the daily quota).

Depending on the methods of quota definition, the following cases are possible:

Quota entered in minutes (manually):

Time Slot	Wednesday, October 16th, 2013					
	Max available	Other activities	% Quota	Quota	Booked activities	Used
Day	51180	60		51120	712	36283
08-10	11040	24	23.97%	12200	200	9580
10-12	11040	16	21.61%	11000	190	9608
13-15	11640	2	26.92%	13700	235	12554
15-17	11640		27.5%	14000	70	3688
<b>Total</b>	<b>45360</b>	<b>42</b>		<b>50900</b>	<b>695</b>	<b>35430</b>

Quota cells are editable and Quota is entered in minutes. The Max available and Other activities values do not affect the Quota values directly. The % Quota values are calculated automatically in proportion to the Quota values so the total equals 100%.

Quota entered as % of the maximum time slot capacity:

Time Slot	Wednesday, October 16th, 2013					
	Max available	Other activities	% Quota	Quota	Booked activities	Used
Day	51180	60		51120	712	36283
08-10	11040	24	100%	11016	200	9580
10-12	11040	16	95%	10472	190	9608
13-15	11640	2	100%	11638	235	12554
15-17	11640		81%	9428	70	3688
<b>Total</b>	<b>45360</b>	<b>42</b>		<b>42554</b>	<b>695</b>	<b>35430</b>

In this case, enter the % Quota, and the Quota value will be calculated automatically on the basis of the Max available values of the corresponding time slots. Quota cells are non-editable. In this example, the *Subtract*

these activities [other activities] from the maximum time slot capacity before calculation of quota option is enabled, and the Other activities value for time slot 08-10 is subtracted from Max available resulting in 100% quota of 11016.

Quota entered as % of the daily quota:

Time Slot	Wednesday, October 16th					
	Max available	Other activities	% Quota	Quota	Booked activities	Used
Day	51180	60		51120	712	36283
08-10	11040		15%	7668	200	9580
10-12	11040		25%	12780	190	9608
13-15	11640		35%	17892	235	12554
15-17	11640		25%	12780	70	3688
<b>Total</b>	<b>45360</b>			<b>51120</b>	<b>695</b>	<b>35430</b>

When this option is selected, enter the % Quota, and the Quota value will be calculated automatically on the basis of the Quota value for the day. Quota cells for time slots are non-editable.

- Capacity Category Quota table: The quota for booking of activities having the selected capacity category. Depending on the settings of the *Quota is entered* parameter in the capacity bucket configuration, the Quota cell can be editable (when quota is entered in minutes) or non-editable (when quota is entered as % of the maximum capacity available in this category, or as % of the time slot quota).

Depending on the methods of quota definition, the following cases are possible:

Quota entered in minutes (manually):

Time Slot Capacity Categories	Friday, October 18th, 2013					
	Max available	% Quota	Quota	Booked activities	Used	Used quota %
10-12	11040	25%	12780	191	8465	66.24%
Install	10440	9.84%	1067	20	895	83.88%
Trouble Call	10440	20.78%	2254	48	1895	84.07%
Upgrade	11040	69.39%	7527	120	5511	73.22%
<b>Total</b>	<b>31920</b>		<b>10848</b>	<b>188</b>	<b>8301</b>	
13-15	11640	35%	17892	237	12923	72.23%
Install	11040	46.7%	5229	44	2276	43.53%
Trouble Call	11040	25.94%	2905	86	4733	162.93%
Upgrade	11640	27.36%	3063	77	4057	132.45%
<b>Total</b>	<b>33720</b>		<b>11197</b>	<b>207</b>	<b>11066</b>	

Quota cells are editable and Quota is entered in minutes. The Max available values do not affect the Quota values directly. The % Quota values are calculated automatically in proportion to the Quota values so the total equals 100%.

Quota entered as % of the maximum capacity available in this category:

Time Slot Capacity Categories	Friday, October 18th, 2013					
	Max available	% Quota	Quota	Booked activities	Used	Used quota %
10-12	11040	25%	12780	191	8465	66.24%
Install	10440	84%	8769	20	895	10.21%
Trouble Call	10440	76%	7934	48	1895	23.88%
Upgrade	11040	90%	9936	120	5511	55.46%
<b>Total</b>	<b>31920</b>		<b>26639</b>	<b>188</b>	<b>8301</b>	
13-15	11640	35%	17892	237	12923	72.23%
Install	11040	75%	8280	44	2276	27.49%
Trouble Call	11040	80%	8832	86	4733	53.59%
Upgrade	11640	68%	7915	77	4057	51.26%
<b>Total</b>	<b>33720</b>		<b>25027</b>	<b>207</b>	<b>11066</b>	

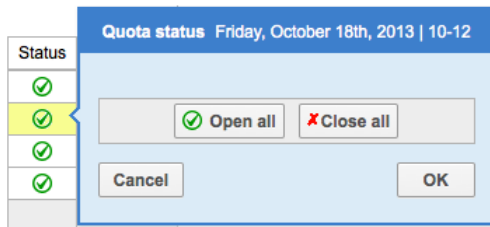
In this case, enter the % Quota, and the Quota value will be calculated automatically on the basis of the Max available values of the corresponding capacity categories. Quota cells are non-editable.

Quota entered as % of time slot quota:

Time Slot Capacity Categories	Friday, October 18th, 2013					
	Max available	% Quota	Quota	Booked activities	Used	Used quota %
10-12	11040	25%	12780	191	8465	66.24%
Install	10440	35%	4473	20	895	20.01%
Trouble Call	10440	25%	3195	48	1895	59.31%
Upgrade	11040	40%	5112	120	5511	107.81%
<b>Total</b>	<b>31920</b>		<b>12780</b>	<b>188</b>	<b>8301</b>	
13-15	11640	35%	17892	237	12923	72.23%
Install	11040	40%	7156	44	2276	31.81%
Trouble Call	11040	25%	4473	86	4733	105.81%
Upgrade	11640	35%	6262	77	4057	64.79%
<b>Total</b>	<b>33720</b>		<b>17891</b>	<b>207</b>	<b>11066</b>	

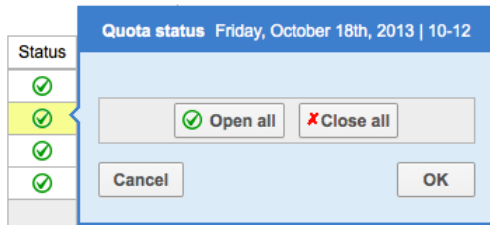
When this option is selected, enter the % Quota, and the Quota value will be calculated automatically on the basis of the Quota value for the time slot. Quota cells are non-editable.

9. **Booked activities:** Number of activities already booked in the selected bucket for the selected day, time slot, or combination of time slot and capacity category. This value is recalculated immediately when any activities are added, rescheduled or canceled.
10. **Used:** The total duration of the activities already booked in the selected bucket for the selected day, time slot, or combination of time slot and capacity category. This value includes the activities duration and travel time and is recalculated immediately when any activities are added, rescheduled or canceled.
11. **Used Quota %:** The percentage of the day, time slot, or capacity category quota used by the booked activities (the ratio of Used to Quota). The method of quota definition (manual or as percentage of capacity) has no effect on this value.
12. **% to stop booking at:** The percentage of the used day quota at which no more activities are to be booked for the selected time slot, or the percentage of the used time slot quota at which no more activities are to be booked for the selected capacity category. Enter this value, manually. The value of this parameter does not change the Quota status. This parameter is used for the Capacity API – when the set percentage has been reached, the get\_capacity function will no longer return quota for the capacity category in the selected time slot.
13. **Status:**
  - Day Quota table: Open or closed status of quota for the selected day. Click this cell to allow manual immediate opening or closing the quota for the entire day.



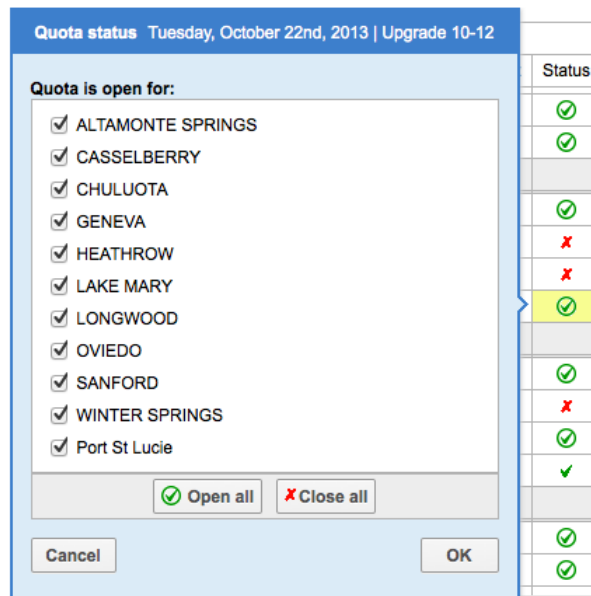
Closing or opening of quota at the day level will close or open quota at the lower levels (time slot and capacity category).

- Time Slot Quota table: Open or closed status of quota for the selected time slot. Click this cell to allow manual immediate opening or closing the quota for the entire time slot.



Closing or opening of quota at the time slot level will close or open quota at the lower level (capacity category).

- Capacity Category Quota table: Open or closed status of quota for the selected capacity category and time slot. Click this cell to allow manual immediate opening or closing the quota.

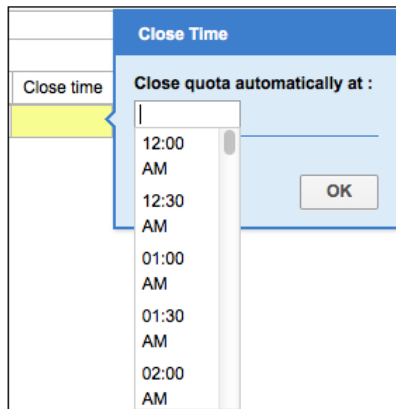


At the Capacity Category level quota can be opened or closed per individual work zones by selecting the corresponding checkboxes or for the entire capacity category in the selected time slot by clicking Open all or Close all.

**14. Close time:**

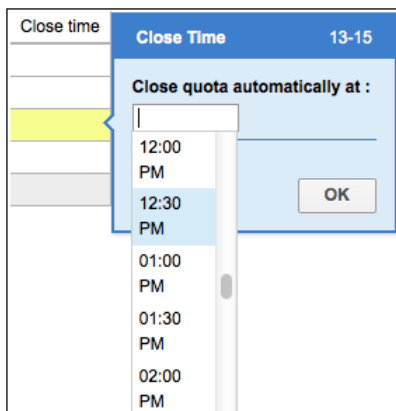


- Day Quota table: Time when the quota is to be closed automatically for the entire day. Click this cell to allow manual setting or changing the close time for the day. At the selected time, the value of the Status cell is changed to closed.



Setting the close time at the day level will cause quota to close at the lower levels (time slot and capacity category) at the same time. If a different close time has been set at a lower level, then quota will be closed at whichever moment is earlier.

- Time Slot Quota table: Time when the quota is to be closed automatically for the selected time slot. Click this cell to allow manual setting or changing the close time for the time slot. At the selected time the value of the Status cell is changed to closed.



Setting the close time at the time slot level will cause quota to close at the capacity category level at the same time. If a different close time has been set for a capacity category, then quota will be closed at whichever moment is earlier.

- Capacity Category Quota table: Time when the quota is to be closed automatically for the selected capacity category and time slot. Click this cell to allow manual setting or changing the close time. At the selected time the value of the Status cell is changed to closed.

Work Zone	Close Time
ALTAMONTE SPRINGS	
CASSELBERRY	
CHULUOTA	
GENEVA	
HEATHROW	12:00 AM
LAKE MARY	12:30 AM
LONGWOOD	
OVIEDO	
SANFORD	
WINTER SPRINGS	
Port St Lucie	

Close Time can be set per individual work zone by selecting the corresponding field, or for the entire capacity category in the selected time slot by entering the close time value in the *Close quota automatically at:* field. If a different Close time is set for the capacity category and a work zone, then close time value defined at the work zone level has priority over the close time set at the level of capacity category.

## Setting Multi-Bucket Mode

The Quota Management functionality has been enhanced by adding the multi-bucket mode which allows viewing the data of all child buckets in the same quota grid. When the company structure includes parent and child buckets, with the multi-bucket functionality implemented, select the parent resource and view the aggregated data for all its child resources. The View window now contains the *Show aggregated results* checkbox. Disable this option to enable multi-bucket display.

When the multi-bucket mode is switched on, a new column, *Capacity bucket*, is added to the quota grid where the child buckets of the selected parent bucket are listed. The quota grid shows the data for each bucket in separate lines.

Sunrise Enterprise						
		Wednesday, October 23rd, 2013		View ▾		
Capacity bucket	Time slot Capacity categories	Wednesday, October 23rd, 2013				
		Quota	Used	Used quota %	Status	Close time
test bucket	08-10	3500	69	1.97%	✓	
	Install				✓	
	Trouble Call				✓	
	Upgrade		69		✓	
	<b>Total</b>		<b>69</b>			
Planning	08-10		11582		✓	
	Install	1350	723	53.56%	✓	07 AM
	Trouble Call	4200	636	15.14%	✓	
	Upgrade	9755	10223	104.8%	✓	
	<b>Total</b>	<b>15305</b>	<b>11582</b>			

## Mass Populate Functionality

This functionality is intended to fill multiple future quota cells using historical data. Such estimation can be made either on the basis of the quota of the previous periods or the actual quota used. Mass populate has replaced the previously existing *Automatic fill* functionality. This name better describes the actual nature of the operation.

**Mass populate** ✕

Field:

Operation:

- copy day-to-day
- copy week-to-week
- shift forward by one day
- shift backward by one day
- next day value = previous day value \* percent
- estimate future values based on past data (day-to-day)
- estimate future values based on past data (week-to-week)

Target dates: *Wed, Nov 6th - Tue, Nov 12th*

Source date:

Source:

The fields populated with the Mass populate function differ depending on the quota level. Below is the complete list of fields used in Mass populate:

### 1. Day:

- Quota
- Min quota
- % Quota
- Status
- Read only flag

### 2. Time slot:

- Quota
- Min quota
- % Quota
- % to stop booking at
- Status
- Read only flag

### 3. Capacity category:

- Quota
- Min quota
- % Quota
- % to stop booking at
- Status
- Locked flag

### 4. Work Zone:

- Status


## Mass Populate Fields

The fields available in the Field drop-down list of the Mass populate window depend on the capacity bucket configuration at the specific quota level.

The following table contains a complete list of operations that can be performed. Availability of a particular operation depends on the selected field.

Operation	Fields	Parameters	Description
Copy day-to-day	All	Date to be copied	This operation allows you to copy values of a given field from one day to one, or multiple days. There is no restriction on the day that can be used as a source of data for this operation. It can belong either to past or to future.
Copy week-to-week	All	Week to be copied	This operation allows you to copy values of a given field from one week to one, or multiple weeks. The values are copied between same days of week (Monday to Monday, Tuesday to Tuesday, etc.). This option is only allowed if one or several whole weeks are shown in the Quota View. There is no restriction on the week that can be used as a source of data for this operation. It can belong either to past or to future. The corresponding calendar control allows you to select the week by clicking on any day of this week. The week is represented by its first day.
Shift forward by one day	All	None	This operation shifts values of a given field by one day forward. The corresponding option is only available if a continuous interval of days is selected on the Quota view. Please note that there is a common rule that requires that a Mass-populate operation should update all the dates that are currently selected on the Quota view. Therefore, in case of the shift forward operation, a value of a first selected/visible date is updated with a value from a previous day (that is invisible). If the view contains both past and future days, the future date will be the first one to be updated. It is updated with a value from the latest past date.
Shift backward by one day	All	None	This operation shifts values of a given field by one day backward. Please note that it is mainly intended to rollback

Operation	Fields	Parameters	Description
			results of a previous forward shift. The corresponding option is only available if a continuous interval of days is selected on the Quota view. Please note that there is a common rule that requires that a Mass-populate operation should update all the dates that are currently selected on the Quota view. Therefore, in case of the shift backward operation, a value of a last selected/visible date is updated with a value from a next day (that is invisible).
Next day value = previous day value * percent	<ul style="list-style-type: none"> <li>• % to stop booking at</li> <li>• Quota</li> <li>• Min quota</li> <li>• % Quota</li> </ul>	Percent	Only available if a continuous interval of days is selected on the Quota view. In this case, it takes a value of a given field from a day before the first selected one and, based on it, calculates values of this field for all other next days. A value for a next day is calculated as a value for a previous one multiplied by a provided percent.
Use estimation	% Quota	None	This operation copies values from the Estimated % quota field to the % Quota fields.
Estimate future values based on past data (day-to-day)	Quota	<ul style="list-style-type: none"> <li>• Number of previous days</li> <li>• Field to be used: Quota or Used</li> </ul>	This operation allows to estimate values of a given field for one or several future days using a linear extrapolation algorithm.
Estimate future values based on past data (week-to-week)	Quota	<ul style="list-style-type: none"> <li>• Number of previous weeks</li> <li>• Field to be used: Quota or Used</li> </ul>	This operation allows to estimate values of a given field for one or several future weeks using a linear extrapolation algorithm. A separate extrapolation trend is created for each day of week (Monday, Tuesday, etc.). Please note this option is only allowed if one or several whole weeks are shown in the Quota View.

 **Note:** Please also note that all these operations ignore the locked flag.



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# Chapter

# 5

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## Reporting on Capacity and Quota

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**Topics:**

- [Viewing Quota History](#)
- [Viewing Close Time History](#)

ETAdirect supports change documentation for Quota history and close time history. The information in these reports can be exported as comma separated values (csv), as an Excel spreadsheet (xlsx), or as XML.

## Viewing Quota History

The Quota History stores data on any changes performed to the Quota screen. You can view Quota history with different filters applied, as well as export the Quota History in the file format selected as the default export format in the **My Display** settings under your user profile.

Quota History for Planning										
Quota for Thursday, October 10th, 2013										Export History
Date	Time Slot	Capacity Category	Work zone	Action	Action Time	Quota	% Quota	Min quota	% to stop booking at	User
10/10/13	08-10	Trouble Call		Change	10/10/13 05:04 AM	-	-	-	83	Admin
10/10/13	10-12	Upgrade	LONGWOOD	Open	10/10/13 05:02 AM	-	-	-	-	Admin
10/10/13	10-12	Upgrade	GENEVA	Close	10/10/13 05:02 AM	-	-	-	-	Admin
10/10/13	10-12	Upgrade	ALTAMONTE SPRINGS	Open	10/10/13 05:02 AM	-	-	-	-	Admin
10/10/13	10-12	Upgrade	SANFORD	Open	10/10/13 05:02 AM	-	-	-	-	Admin
10/10/13	10-12	Upgrade	LAKE MARY	Open	10/10/13 05:02 AM	-	-	-	-	Admin
10/10/13	10-12	Upgrade	CHULUOTA	Close	10/10/13 05:02 AM	-	-	-	-	Admin
					10/10/13 05:02					

The Quota History displays the data organized in the columns as follows:

- Date:** Date of the action.
- Time Slot:** Time slot to which the changes apply. Filter the values in the Time Slot column by selecting or deselecting some or all of the time slots used in Quota Management.
- Capacity Category:** Capacity category to which the changes apply. Filter the values in the Capacity Category column by selecting or deselecting some or all of the capacity categories used in Quota Management.
- Work zone:** Work zone to which the changes apply.
- Action:** Action performed in the Quota Management screen. Filter the values in the Action column by selecting or deselecting some or all of the following options:
  - Change: Changes to the values of the Quota, % Quota, Min quota, and % to stop booking at cells on any Quota level
  - Close: Quota closing for any day, time slot, capacity category or work zone
  - Open: Quota opening for any day, time slot, capacity category or work zone
  - Remove work zone specific settings: Quota opening or closing for particular work zones
- Action time:** Time of the action performed in the Quota Management screen. The values in the Action time column are shown in the time zone of the selected capacity bucket. Filter the values in the Action time column to display the actions performed within the last 4 hours, last 8 hours, last day or last 2 days. Additionally, it is possible to sort in either ascending or descending order.
- % Quota, Min quota:** These columns are only shown when the Quota is defined as a percentage of the available capacity according to the configuration of the capacity bucket. They show the corresponding values.
- Quota:** Changes to the Quota values.
- % to stop booking at:** This column is only shown when the *% to stop booking at* option is enabled at the Time Slot or Capacity Category level according to the configuration of the capacity bucket.
- User:** User which made changes to the quota. Filter the values in the User column by selecting or deselecting some or all of the user names. Additionally, it is possible to sort in either ascending or descending order. When a change has been performed automatically according to the settings (for example, automating closing of the quota at the predefined time), the User column will contain no value for such change.



**Note:** Quota history is not available in the multi-bucket mode.



## Viewing Close Time History

Changes to Quota close time are shown in the Close Time History. You can view the close time history with different filters applied, as well as export the Close Time History in the file format selected as the default export format in the **My Display** settings under your user profile.

The screenshot shows a window titled "Close time history for Planning" with a close button (X) in the top right corner. Below the title bar, it displays "Close time for Wednesday, November 6th, 2013" and an "Export history" link. The main content is a table with the following data:

Time slot	Capacity category	Work zone	Action	Action time	Close time	User
08-10			Change close time	11/06/13 09:44 AM	01:30 AM	Admin
10-12	Upgrade		Change close time	11/06/13 09:44 AM	02:00 AM	Admin
08-10	Trouble Call	GENEVA	Change close time for work zone	11/06/13 09:45 AM	04:30 PM	Admin

The Close Time History displays the data organized in the columns as follows:

- Time Slot:** Time slot for which close time was changed. Filter the values in the Time Slot column by selecting or deselecting some or all of the time slots used in Quota Management.
- Capacity Category:** Capacity category for which close time was changed. Filter the values in the Capacity Category column by selecting or deselecting some or all of the capacity categories used in Quota Management.
- Work zone:** Work zone for which close time was changed. Filter the values in the Work Zone column by selecting or deselecting some or all of the work zones for which close time was changed.
- Action:** Action performed to the close time. Filter the values in the Action column by selecting or deselecting some or all of the following options:
  - Change close time: Changes to the close time on any Quota level
  - Change close time for work zone: Changes to the close time of individual work zones
- Action time:** Time of the action performed to the close time. The values in the Action time column are shown in the time zone of the selected capacity bucket. Filter the values in the Action time column to display the actions performed within the last 4 hours, last 8 hours, last day or last 2 days. Additionally, it is possible to sort in either ascending or descending order.
- Close Time:** Resulting value of close time. Filter the values in the Close time column to display changes made within any 2-hour period of the day by selecting some or all of the options. Additionally, it is possible to sort in either ascending or descending order.
- User:** User which made changes to the quota. Filter the values in the User column by selecting or deselecting some or all of the user names. Additionally, it is possible to sort alphabetically in either ascending or descending order. When a change has been performed automatically according to the settings (for example, automating closing of the quota at the predefined time), the User column will contain no value.



# Glossary

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## Action Link

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A link that opens a screen where you can perform an action in the ETAdirect system. Common examples include Add Activity, View Details, Delete, and Modify.

## Action Management

---

A screen in ETAdirect where action links are managed. The information in this screen determines which links appear in which locations in the interface.

## Activate Queue

---

A link or button that starts the resource's workday in ETAdirect. For ETAdirect to monitor delivery in real time and respond to updates, a resource must activate his or her queue, or route.

## Activity

---

Activity is any type of things service provider does (such as: customer-related job, network maintenance, lunch break, warehouse visit, meeting, etc). Every Activity has Type, start and end time. Activity type defines specific parameters of the activity (flow, attributes, color on screen, etc)

- A **Non-scheduled Activity** is an Activity not assigned to a specific date.
- A **Not-ordered Activity** is an Activity that its order of execution in the queue is not defined at the moment, so it can be executed at any time during the working day; Not-ordered activities do not have ETA and Delivery window defined.
- An **Ordered Activity** is an Activity that its place in the queue is defined, and it has to be performed in the correspondent moment of the working day. Order of activities can be changed; Ordered activities can be set not-ordered and the other way round.

## Activity Types

---

A label that defines the specific parameters of the activity such as which time slot this activity normally takes place in. Examples include installation, deactivation, delivery, and lunch break.

## Add Time

---

Delay A feature in ETAdirect that allows a resource or other user to add additional time to an activity when the activity extends beyond the estimated end time.

## Agent

---

In ETAdirect implementation methodology term "Agent" is used for any standalone application that interacts with the ETAdirect platform via ETAdirect API or ETAdirect kernel

## Aggregator

---

An Aggregator is a high level entity on the resource (provider) tree that functions as a parent directory for other providers. An Aggregator cannot be assigned appointments.

## All Day Appointment

---

All-day appointment is an appointment that can be done any time during the day without violating any obligations of the company. In ETAdirect terminology, All-day appointments are appointments without a Service window. Pay attention that sometimes people mix All-day appointment (without service window) and Not ordered appointment (without ETA).

## All Day Activity

---

An activity without a service window that has been called in that day and marked **Urgent** for same day service.

## Appointment

---

Appointment is one of the fundamental entities of the ETAdirect system. It represents one segment of work (usually it is a synonym to work order) that is related to a specific customer. Appointment attributes include customer and an address where work takes place. If work order is not related to a specific customer, another entity that can be referred to as an Activity.

## Appointment Status

---

Appointment status (do not confuse with Appointment type) defines a stage in the appointment flow. Possible values:

- *Pending*: appointment is planned to be executed, provider has not arrived on site yet. This is the initial status appointment has on creation. From this status appointment can be started, canceled or deleted
- *Started*: provider has arrived to the place of appointment. Only one appointment can be started in providers route at a given time. Started appointment can change status either to suspended, completed or not done.
- *Completed*: provider has successfully finished work. This is a final status and can't be changed (only Reopen appointment can be created based on this one)
- *Not done*: provider could not finish work successfully. This is a final status and can't be changed (only Reopen appointment can be created based on this one)
- *Suspended*: appointment could not be finished successfully but provider plans to return later and resume work. Appointment gets to this status using the Suspend command that creates a clone of this appointment in the same queue (as a Not ordered appointment with pending status)
- *Canceled*: customer asked to cancel the appointment or it was canceled for a different reason. This is a final status and can't be changed (only Reopen appointment can be created based on this one)
- *Deleted*: similar to canceled but such appointments are not shown in ETAdirect. They look like they have been physically erased.

## Appointment Type

---

Appointments can be of one of the following types:

- *Regular*: typical appointment. Originally every work comes as regular appointment (? this is not clear/Irad)
- *Pework*: appointment created by the Pework command. This command is applied to a regular appointment and creates a clone of it with the type prework to distinguish between the two. Pework appointments are created as already started (see Appointment status).

- *Reopened*: appointment created by the Reopen command applied to some completed, not done or canceled appointment (see Appointment status). This command clones the appointment creating a new Not ordered appointment with type reopen and status pending for the same provider.

The following appointment types are used for the different entities that share the same database table:

- *Activity*: this is an appointment that does not have a customer associated with it. Usually it is a break, assistance another provider or non-customer related work (network maintenance). See Activity for more details.
- *Team work*: this is specific type of activity where one provider assists another provider (is a member of the team). See Team work for details.

## API

---

An Application Programming Interface (API) is a particular set of rules and specifications that a software program can follow to access and make use of the services and resources provided by another particular software program that implements that API. It serves as an interface between different software programs and facilitates their interaction, similar to the way the user interface facilitates interaction between humans and computers. All ETAdirect APIs are based on standard protocol – SOAP (version 1. 1). The interfaces process SOAP requests received by HTTP protocol. APIs have no limitations on the location, technology or platform used for integration (i.e.: Java, . Net, C/C++ on Windows or Unix).

## Assigning

---

**Dispatch** Attaching an individual activity or a queue of activities to a resource.

## Assistant

---

In a Teamwork activity, the resource that assists another resource. In the Resource Tree, the arrow points away from the Assistant. See [Teamwork](#) and [Team Leader](#) for more information.

## Billing System

---

System where customer details are held, customer billing takes place, and/or activities are entered.

## Booked Activities

---

The number of activities that are either in an ETAdirect bucket or located on a route.

## Bucket

---

Element of the Resource tree representing place where jobs are kept before they are assigned (manually or automatically) to specific providers.

## Business Rules

---

A number of settings in ETAdirect that align the functions of the system with the strategies and practices of your company.

## Capacity Categories

---

A set of work skills and time slots that are bundled together to estimate the time and skills required for a particular task. This information is sent through an API to your company's appointment system so that agents can tell whether qualified resources are available before they book an appointment.

## Calendar

---

A view of the schedule for a resource, group or bucket.

## Capacity bucket

---

Bucket used for Quota management

## Capacity category

---

Predefined set of work skills, work skill groups and time slots within which they are considered by the Capacity API.

## Capacity Management

---

A process of managing a workforce to ensure that a company has enough people with the specific skills to do a certain amount of work. There is a related process, Quota management, that defines the reverse relationship.

## Company Boundaries

---

The area where your company performs customer service. Company boundaries are defined using the coordinates of the upper left corner and the lower right corner of the area.

## Company Settings

---

A screen in ETAdirect that contains many of the configuration settings. To change your configuration settings, contact TOA support.

## Compliance

---

Following the route as predicted by ETAdirect. A resource is in compliance if he or she starts the activity at the estimated arrival time, completes the activity at the estimated completion time, has minimal idle time, and does not detour from the calculated driving directions.

## CSR

---

Customer Service Representative. A person who speaks with customers and sets appointments.

## Customer-Facing Activity

---

A task that must be performed for a customer. Typically performed at the customer's home or business. Examples include installations, upgrades, and deliveries. See [Activity](#) for more information.

## Daily View

---

A view that shows to see the calendar of a resource, group, or bucket for a whole week. This view is useful for making small changes to individual calendars in the current week.

## Delivery Window

---

The time that ETAdirect estimates that the resource is expected to arrive at the customer's home or business. The window includes a buffer to account for travel time and the potential for delay. This timeframe is shorter than the Service Window.

## Dispatcher

---

A person who allocates activities and monitors the progress of activities and resources.

## Display

---

A screen in ETAdirect that contains configuration settings used to control what properties and layout structures users can actually see within the forms of the interface. These settings also control the format of some information, for example, the first day of the week in calendar views.

## Equipment

---

See [Inventory](#).

## Estimation

---

A term used in Capacity Management also referred to as "capacity estimation" which determines the number of man-minutes available for a particular time slot based on resource calendars.

## ETA

---

**Estimated Time of Arrival** The time that ETAdirect predicts that the resource will arrive at the customer's location. ETA for pending activities is calculated dynamically from historical data. For completed activities, the ETA is the time when the resource actually arrives at the customer's location.

## Field

---

Property present in the system by default

## Filters

---

Typically, a set of parameters used to reduce the results of a search. Filters are also used in routing plans to predefine the information that routing uses to distribute activities to resources.

## Forecasting

---

New feature of ETAdirect allowing to forecast the company workload on the basis of historical data

## Glossary

---

The configuration dictionary that maps default names, labels, and phrases use in the interface to the client's preferred names, labels, and phrases. **Note:** Property names are managed in the Properties screen.

## GUI

---

Graphical User Interface, allowing people to use software by manipulating images rather than by issuing text commands.

## Group

---

A container in the Resource Tree used to sort and organize the other items in the Resource Tree. Groups are typically used to sort resources by location. Groups cannot own a route and you cannot assign activities to them.

## Hint

---

A pop-up window that displays additional information about the activity or resource that you select. Hints also contain actions links that can take you directly to the action that you want to perform on the item.

## Historical data

---

Data of the past periods available in the database or from other sources

## Holidays

---

A screen in ETAdirect where you can define the dates that outgoing communications of certain messages are blocked.

## Idle Time

---

Any time that a resource spends not in transit or not working on an activity.

## Internal Activity

---

A task that is not performed directly for the customer. Internal activities typically do not take place at the customer's home or business. Examples include vehicle maintenance and company meetings. See [Activity](#) for more information.

## Inventory

---

A list of items managed within ETAdirect and can include various inventory pools as well as serialized and non-serialized parts. See [Inventory Pools](#), [Trunk stock](#), [Non-serialized Inventory](#), and [Serialized Inventory](#) for more information.



## Inventory Pools

---

Inventory associated with a resource, typically *Trunk stock*, end customer, or warehouse.

## Jeopardy Situation

---

A situation in which ETAdirect predicts that the activity will miss its promised service window. Predicted jeopardy situations are colored pink in the ETAdirect interface.

## List View

---

A chronological list of the day's activities for the selected resource, group or bucket. Activities are ordered by estimated start time.

## Login Policies

---

A screen in ETAdirect that sets the requirements for logging in and for usernames and passwords.

## Manage

---

The core module of ETAdirect. Includes all of the main functions including monitoring, routing, and reporting.

## Map View

---

A view of the day's activities for the selected resource, group, or bucket. This view tables the activities on a map.

## Mass Activity

---

An activity involving 2 or more resources.

## Max Available

---

The maximum capacity available by calendar on the selected day, time slot or capacity category

## Message Scenarios

---

A Message Scenario is a set of rules that specifies how to process a message notification or transaction. Message Scenarios are launched by Notification Triggers. See *Notification Triggers* for more information.

## Min quota

---

The minimum number of minutes to be allocated for booking of the activities belonging to the selected time slot (only on time slot and capacity category level).

## Mobility

---

The user interface for ETAdirect that is accessed through a mobile device. Field service representatives typically use this interface. It is a separate module of ETAdirect.

## Non-Instantiated Activities

---

All activities not part of quota management (for which no capacity category associated with work skills exists)

## Non-Scheduled Activity

---

An activity that is not assigned to a specific date.

## Non-Working Reasons

---

A calendar setting used when a resource is absent. Typical non-working reasons include illness, vacation and bereavement.

## Non-Serialized Inventory

---

Inventory associated with a part that is generically defined within ETAdirect so that Trunk stock might be decremented based on required inventory associated with activities. (Nota bene: Any part can be defined as "non-serialized inventory" even those parts with serial numbers on them. For example, a cable modem with a serial number, can be "Non-serialized inventory" within ETAdirect so that Trunk stock inventory levels can be managed daily and associated with a route). See [Serialized Inventory](#) and [Required Inventory](#) for more information.

## Not Done Activity

---

A status used to identify an activity that cannot be completed today. For activities that cannot be completed right away, but can be completed today. See [Suspend](#) for more information.

## Not Ordered appointments

---

Are the ones which order of execution was not defined. Such appointments do not have ETA. Provider, dispatcher or routing may define the order (for example command change order in mobile interface or edit appointment command in web interface).

## Notification

---

**Message** Activity related information sent by ETAdirect to a customer, a resource, a dispatcher, or another system. Notification can be received through telephone, email or SMS.

## Notification Triggers

---

Workflow events that invoke Message Scenarios when a particular internal event occurs. As a result, messages are delivered to customers. For example, if you use a post activity survey, you might have a notification trigger to launch the post activity survey message. In this case, when a customer-facing activity is completed, a Notification Trigger

launches a Message Scenario that sends the post activity survey message to the customer. See [Message Scenarios](#) for more information.

## Ordered appointments

---

Means that the order of execution is defined - resource, SmartRouting or dispatcher have already defined that this appointment will be executed after another defined appointment. In this case appointment gets an estimated time of arrival and is classified as ordered.

## Other activities

---

Include only repeating, mass and shift activities including those without instances. See [Non-instantiated Activities](#) for more information.

## PAS

---

**Post Activity Survey.** A survey that you might send to your customer after the activity is completed to measure their satisfaction.

## Pending Activity

---

An activity status used for activities that are scheduled but not yet started.

## Percent Quota

---

Percent of the capacity that is available for booking.

## Percentage to Stop Booking

---

The percentage of the used quota at which activities booking is to be stopped. If an API call is ?????

## Permissions

---

A screen in ETAdirect where you can configure which features users can see and use. Permissions are applied to Profiles, not individual users. See [Profiles](#) for more information.

## Placeholder ID

---

A number used to identify names, labels, and phrases used in the ETAdirect interface. Each name, label, and phrase has a unique number.

## Planning

---

Company's estimation of the workforce or workload required at a certain moment.

## Post Activity Survey

---

A survey that you might send to your customer after the activity is completed to measure their satisfaction.

## Profiles

---

A screen in ETAdirect where you can configure groups of users. Those groups are then assigned Permissions to control which features they can see and use. See [Permissions](#) for more information.

## Properties

---

A screen in ETAdirect where user interface fields are defined. You can specify details such as field length, field type, and valid values.

## Provider

---

**Technician Resource Person** who performs work at the customer's premises (the one who provides the service). A low-level entity on the Resource Tree, a child of a bucket or group. A resource can also represent regular work teams, equipment, trucks etc.

## Quota

---

A limitation set on the number of activities booked within a selected day, time slot or capacity category.

## Quota Management

---

A process of defining the amount of work (per work skill and time slot) that a company should perform for a specific area (example: bucket) for a specific day. There is a related process, Capacity management, that defines the reverse relationship.

## Quota Matrix

---

The number and type of appointments that you book directly affects the ability of the SmartRouting module to optimize the routes. For example, if you overbook your activities, you will not have enough time and resources to accomplish all of them. If you book a lot of activities that require the installation work skill, but you only have a few resources who are qualified to perform that skill, then the SmartRouting module will not be able to make good matches for those activities.

## Repeating activity

---

An activity recurring with a predefined frequency in a predefined period.

## Regular Work Zone

---

A region where a resource's activities are typically located.

## Required Inventory

---

When a particular resource's route includes activities associated with non-serialized inventory, ETAdirect can highlight where Trunk stock is insufficient. In the event that a resource's Truck stock is insufficient for a particular route, required inventory highlights the job and indicates which Non-serialized inventory components are missing.

## Resource

---

An element in the resource tree representing a defined company asset. Put another way, a Resource is the ETAdirect entity representing someone (or something) which provides service on behalf of the company.

## Resource Calendars

---

A view of a resource's calendar that displays the details about an individual resource's schedule. This view is useful for making changes that involve more than one day or more than one resource. See [Calendar](#) and [Daily View](#) for more information.

## Resource Tree

---

A hierarchical view of the organization's resources, typically sorted by geographical region. It is displayed on the left side of the screen in Manage.

## Resource Types

---

A set of characteristics that you can apply to a resource. Default Resource Types are Groups, Buckets, and Resources. See [Group](#), [Bucket](#), and [Resource](#) for more information. If you want to change the Resource Types that you use in ETAdirect, contact TOA support.

## Route

---

**Queue** A list of activities and activities assigned to a resource for a specific date.

## Route by Inventory

---

A concept within ETAdirect that limits routing options based on each resource's trunk stock and those activities associated with non-serialized inventory.

## Routing

---

The act of assigning activities to resources. ETAdirect routes activities to resources using a sophisticated algorithm that considers a number of factors including calendars, work zones, and work skills.

## Routing Plans

---

Routing plans provide the rules that ETAdirect uses to route activities to resources. Routing plans work together with the other ETAdirect components to apply your business goals and strategies to the routing process.

## Routing Profiles

---

Containers that hold routing plans. Routing Profiles can be assigned to buckets. You can use Routing Profiles to assign several routing plans at once.

## Scheduled Activity

---

An activity that is assigned to a particular day and a particular time slot.

## Scheduled, Not Ordered Activity

---

All Day Activity An activity that is assigned to a particular day, but is not assigned to a particular time slot.

## Serialized Inventory

---

Inventory parts that are unique and cannot be decremented based on a route's activities. See also: Non-serialized inventory, Required inventory.

## Service Level Agreement

---

The time window that the activity must be **completed** in. This window is promised to the customer.

## Service Window

---

**Time Slot.** The time window that the activity must be **started** in. This window is promised to the customer. This timeframe is longer than the Delivery Window.

## Shifts

---

Patterns of working time. You can create separate shifts for each of the different working time patterns within your organization.

## SmartCollaboration

---

A separate module for ETAdirect that provides a real-time, context-aware collaboration tool for all ETAdirect users. With SmartCollaboration, a user can, for example, locate nearby, working resource and share details about a resource, activity, or inventory item. Also, SmartCollaboration supports a confirm-receipt process for moving an activities or inventory which is always valuable but even more so when resources are in remote locations and potentially off line.

## SmartLocation

---

SmartLocation uses geo-location information to display a resource's actual location on a map in real time. In addition, the feature can compare the resource's actual route to the projected route within ETAdirect. Resource location can be derived either from a vehicle-installed GPS device communicating via API to ETAdirect and / or through a GPS-enabled mobile phone with an open HTML5 browser.

## Status

---

A term with specific and different meanings depending on the ETAdirect module used.

- Capacity and Quota management status refers to a specific work zone and whether it is open or closed.
- SmartManage and SmartMobility, the term "appointment status" (but sometimes shortened to "status") refers to whether a routed job is pending, started, completed, not done, suspended, canceled, or deleted. See [Appointment Status](#) for more information.

## Statistical Parameters

---

A screen in ETAdirect where you can configure the parameters used when collecting and analyzing statistics. ETAdirect uses statistical data on actual appointment and travel duration to calculate estimated time of arrival and delivery window. Additionally, Routing uses the statistics to assign appointments to resources in the most effective manner.

## Suspend

---

An activity status that allows an activity to be postponed if the work cannot be completed right away. Suspend allows the activity to be completed at a later time during the day. For activities that cannot be completed in the same day. See [Not Done Activities](#) for more information.

## Team Leader

---

In a Teamwork activity, the resource who is being assisted. In the Resource Tree, the arrow points to the Team Leader. See [Teamwork](#) on page 71 and [Assistant](#) for more information.

## Teamwork

---

An activity that is performed by two resources. One resource is the Team Leader and the other resource is the Assistant. See [Team Leader](#) and [Assistant](#) for more information.

## Technician

---

A resource that performs technical services on behalf of the company.

## Time Slots

---

Date and time interval that defines when an activity has to be started; this time is typically agreed to between the customer and client.

1. A fixed service window defined with a name and label, specifying when certain types of activities can be performed.
2. Service Window (if the activity type does not support time slots)

## Time View

---

A view of the day's activities for the selected resource, group or bucket on a Gantt table. Activities are displayed on timelines, with each activity as a block of time.

## Travel Areas

---

Travel areas define the maximum allowed travel territory for a company.

## Truck

---

A default Resource Type. See [Resource Type](#) for more information.

## Trunk Stock

---

Inventory carried in a vehicle. See [Inventory pools](#) for more information.

## Unscheduled Activity

---

An activity that could take more than one day to complete.

## Used

---

A term in in Capacity and Quota management representing the duration of all activities booked for the selected day, time slot or capacity category.

## Used Quota Percentage

---

The percentage of the quota used by the booked activities.

## User

---

A person who uses ETAdirect. An account used by a resource, dispatcher, manager, etc. to log into ETAdirect.

1. A person using ETAdirect
  2. An entity used for authentication and authorization, allowing people or external software to access ETAdirect
- Work Skill 1) An activity that a resource is

## Visit

---

A group of activities that are all performed at the same location on the same day.

## Web Services Description Language

---

**WSDL** An XML-based interface description language that is used for describing the functionality offered by a web service. A WSDL description of a web service (also referred to as a WSDL file) provides a machine-readable description of how the service can be called, what parameters it expects, and what data structures it returns. It thus serves a purpose that corresponds roughly to that of a method signature in a programming language. (*source: Wikipedia*).



## Work Schedules

---

Work schedules are templates made up of a combination of shifts and non-working times. When grouped as a work schedule, these shifts and non-working times can be applied all at once to a bucket or to an individual resource. To change, add, or remove Work Schedules, contact TOA support.

## Work Skill Levels

---

ETAdirect matches resources to activities through shared work skills and work skill levels. As a result, the way you configure work skills and work skill levels has a direct impact on the matches that ETAdirect creates between activities and resources.

1. An activity that a resource is qualified to perform (resource property) .
2. The qualification required to perform an activity (activity property).

## Work Skill

---

Work skills are sets of skills or competencies that resources are qualified to perform. To change, add, or remove Work Skills, contact TOA support.

## Work Skill Conditions

---

The data that ETAdirect uses to assign work skills to activities.

## Work Zone

---

Defined geographical area where a resource is authorized to perform service.

## Work Zone Dictionary

---

A screen in ETAdirect where Work Zones are defined. The Work Zone Dictionary lists all defined work zones and their associated keys. To add, change, or remove work zones, contact TOA support.

