SmartManage User Guide

Part Number E62346-01

Contents

About this Document

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

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 accomplish the following goals:

- **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 actity is a risk, you can move it to avoid the service window being missed.

Chapter

1

Logging in to the ETAdirect Manage Interface

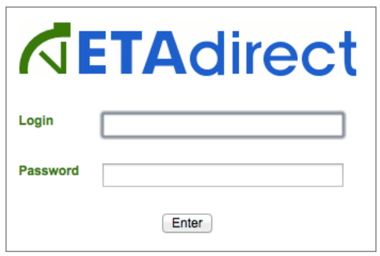
Topics:

- **Changing Your Password**
- **Getting to Know the Interface**

You must have a username and password to log in to the ETAdirect Web interface. If you do not know your user name or password, contact your system administrator.

You can access ETAdirect from any computer with an Internet connection and a Web browser.

1. Open your Web browser.
2. Type in the address bar: https://companyname.etadirect.com
3. Press **Enter**. The ETAdirect login window displays as shown below.



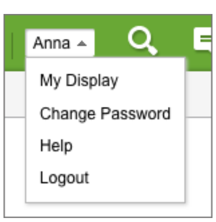
4. Enter your username and password and then click **Enter**.
5. Set this page as a favorite or bookmark so that you can access it easily.

   Note: Do not use a shortcut. If you use a shortcut, opening another Internet window will overwrite your ETAdirect screen.

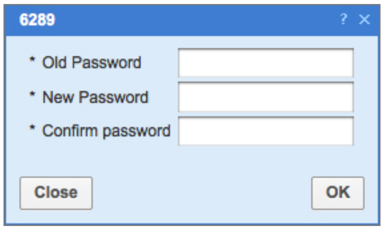
Changing Your Password

You can change your password at any time.

1. Click your username on the menu. A drop-down menu displays.
2. Select **Change Password**.



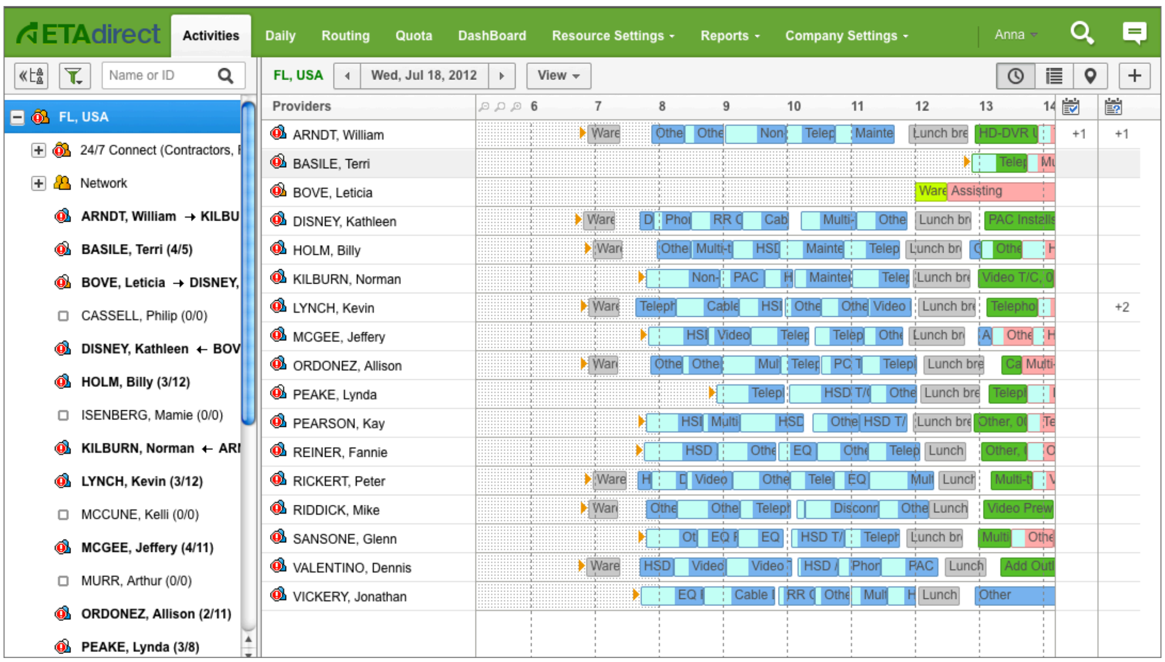
3. Enter the old password and then enter the new password twice. You must follow your company's password requirements.



4. Click **OK** to save the new password.

Getting to Know the Interface

When you first log in, the Activities tab is active as shown below. This is where most of the dispatch work is performed in ETAdirect.



1. **Resource Tree:** Provides a hierarchical view of the organization’s resources, typically sorted by geographical region. Resources are grouped into Buckets and **Groups**. When you select a resource from the Resource tree, that resource’s activities are displayed in the Work Area to the the right.
2. **Resource Tree Filters / Resource Search:** Used to choose or find resources. When you select a resource, their activities are displayed in the Work Area.
3. **Calendar:** Used to choose the date for the activities that you want to view in the Work Area.
4. **View Button:** Used to view filters and to choose activities that you want to see in the Work Area. The View Button is available in List, Time and Map views.
5. **Action Button:** Use to view available actions. The actions button displays a list of available actions that can be performed on the resource that you selected in the Resource Tree. The Action Button is available in List, Time and Map views.
6. **Screen Switch Buttons:** Used to switch between **Time View**, **List View**, and **Map View** in the Work Area.
7. **Activity Search:** Used to find Activities. This field searches all of the activities in the ETAdirect system.
8. **Community Button**: Used to communicate in real time with resources or other ETAdirect users.

9. **Work Area:** Used to view activities for the resource you have selected. The Work Area is the main display area to the right of the Resource Tree. Items selected from the Resource Tree and the Dashboard are displayed here. Search results are also displayed here.

Chapter

2

About the SmartManage Interface

Topics:

- **Resource Tree**
- **Work Area**
- **Viewing Resources and Activities**
- **Menu Tabs**
- **Lower Work Area Panel**
- **Activity Detail Screen**
- **Hints**
- **Filters**
- **Alerts**

This section provides an overview of the screens, sections, and features that you can use to accomplish daily activities.

- The **Resource Tree** organizes all the elements of your configuration — both personnel and equipment — into hierarchical groupings usually based on geographic location.
- Expand those groups and select a resource from the tree and the system will display that resource's schedule in the **Work Area**.
- Take that display down another level in the **Lower Work Area** where workloads can be reviewed and tasks dragged and dropped from one resource to another.
- **Menu Tabs** run across the top of the grid giving you access to other parts of the system, such as Reports and Company Settings.

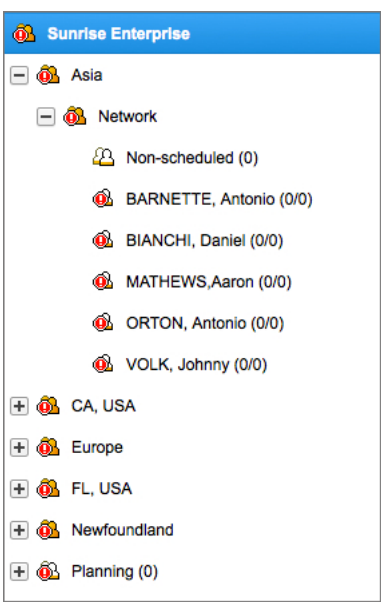
Resource Tree

The Resource Tree provides a hierarchical view of the organization’s resources, typically sorted by geographical region. It displays on the left side of the screen.

Tip: Click the Toggle Button

 to show or hide the Resource Tree.

When you select a resource from the Resource tree, that resource’s activities display in the Work Area on the right. Click the plus sign (+) next to an entity in the **Resource Tree** to expand and view the entities under that group or bucket; click the minus (-) sign to collapse that view.



There are three types of items in the Resource Tree:

- **Groups:** Groups can be used to sort and organize the other items in the Resource Tree. They are typically used to arrange resources into groups by location. Groups cannot own routes and you cannot assign activities to them.
- **Buckets:** Buckets can be used like groups to sort and organize items, but you can also use them to hold activities that you want to route to the resources in the bucket.
- **Resources:** Resources represent both the individuals who perform activities and the items that are paired with them. Examples of resources include technicians, trucks, tools, and equipment.

Resources are the owners of activities. Activities are assigned to them based on skills, certifications, geographical locations, and their availability to guarantee arrival at the customer site within the promised window.

The table below provides an overview of the roles performed by each item in the Resource Tree:

Table 1: Resource Tree Roles

	Sort and Organize Resources	Hold Groups	Hold Buckets	Hold Resource	Hold Activity	Own Route or Activity
Group	X		X	X		
Bucket	X			X	X	
Resource						X

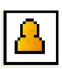
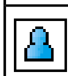
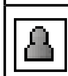
Resource Tree Icons

The shape of the icons in the Resource Tree indicate whether the entity is a bucket, group, or resource as shown in the below:

Double Silhouette: Bucket or group. Buckets will generally have numbers to the right of them, while groups will not.

Single Silhouette: Mobile employee, resource, truck or equipment.

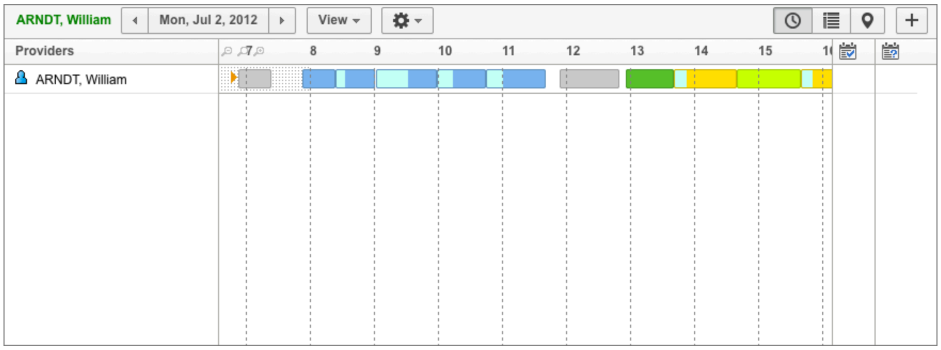
The color of the icons indicates the status of the resource’s queue:

Icon Colors
 Yellow – Resource does not have a route or the route is inactive.
 Blue – Route is activated. (Resource is working)
 Grey – Route is deactivated. (Resource has finished working for the day)

Additional symbols appear for certain exception situations.

Work Area

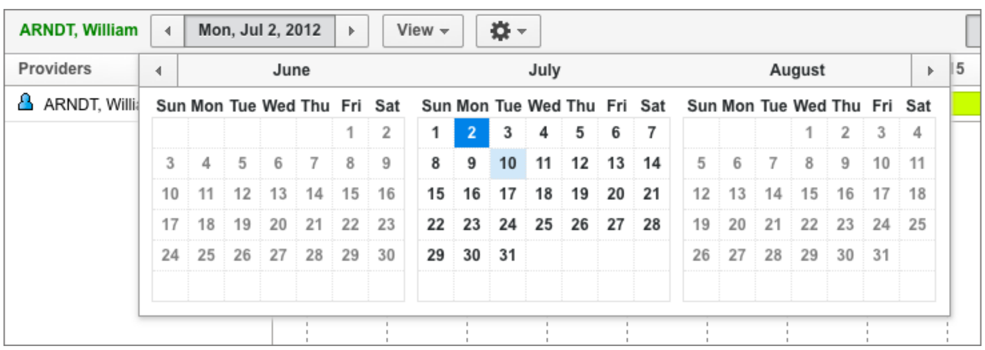
The **Work Area** displays the details about the resource selected in the Resource Tree. The information changes, depending on the tab selected in the menu. Across the top of the work area are several buttons. These buttons access various features and are described in detail below.



Date Field

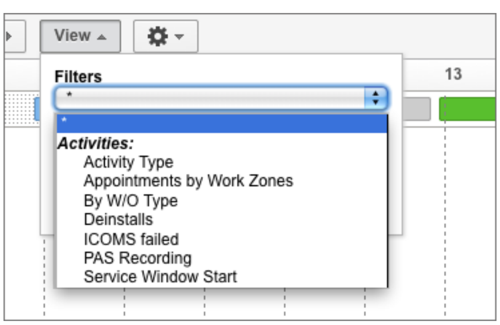
The date displays next to the resource name.

View previous or future days by clicking the left or right arrows. Click the date itself to view the entire calendar.



View Button

The View button allows you to fine-tune the information you see in the Work Area. You can contains a list of predefined filters. Filters are predefined search criteria so you can find information quickly.

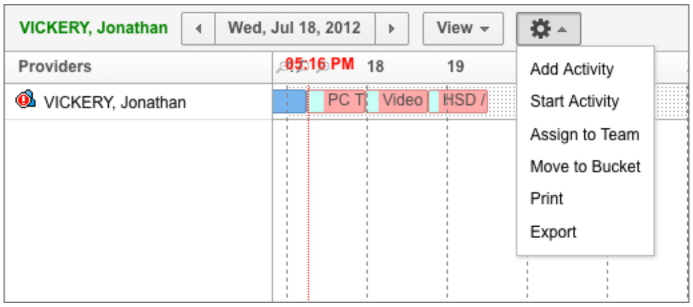


Choose a predefined filter from the drop-down list or sort the data using the check boxes. You can also create custom filters. See **Creating a Filter** for details.

Action Links

The **Action** button  gives you access to a list of actions that affect the contents of the Work Area.

Your profile determines the actions that you will be able to see in the drop-down menu. These same links are visible in the **Hints** boxes.



The Actions you see depend on the screen you are viewing and your settings.

Views

You can view the information in the Work Area in several different ways:

- **Time View:** A Gantt table that displays the activities for the selected resource, group, or bucket in timelines, with the activities as blocks of time. Time view consists of an upper and lower panel, each with its own Resource tree and controls for identifying and zooming in on particular resources.
- **List View:** A chronological list of the day's activities for the selected resource, group or bucket. Activities are ordered by estimated start time.
- **Map View:** A map that displays the day's activities and provides directions as well as pictutes of particular locations.
- **Daily View:** A weekly calendar snapshot of all the activities scheduled for the selected resource, bucket or group.

  For more information about each of these views, see the following sections:
- **Time View**
- **Map View**
- **Daily View (Calendar)**

View Switch Buttons

Use these buttons to switch between Time View, List View and Map View.

Color Codes in the Views

The activities displayed in the Work Area are classified by color, this provides you with a quick view of the status of the day's schedule.

The table below explains each of the default colors and their corresponding statuses:

Note: Color codes can be changed during implementation to reflect the colors your company prefers for representation of the various activities.

	Pending activity (on time).
	Pending activity (in jeopardy of being late).

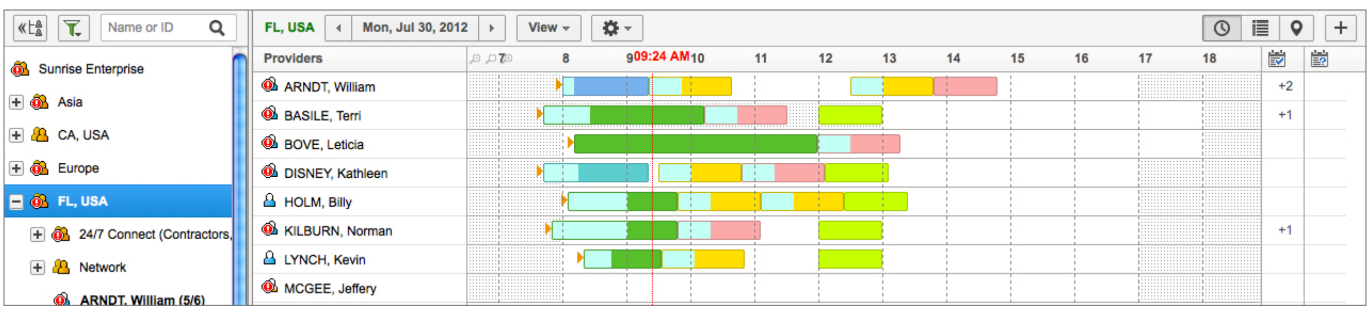
	Not ordered activity.
	Pending internal activity or teamwork.
	Started activity or teamwork.
	Ended activity.
	Suspended or cancelled activity or teamwork.
	Travel time.
	Ended activity.
	Not done activity.
	Pre-work, or re-opened activity.

The colors in ETAdirect are consistent throughout all the views. For example, started activities are always green whether you are in List view, Time view or Map view. For quick reference, this list is also available under Help.

Time View

This view is a Gantt table that displays the activities for the selected resource, group or bucket in timelines with activities shown as blocks of time. Dispatchers and Managers often use this view because it displays multiple routes in one view.

The Time view provides an instant picture of the day in real time.

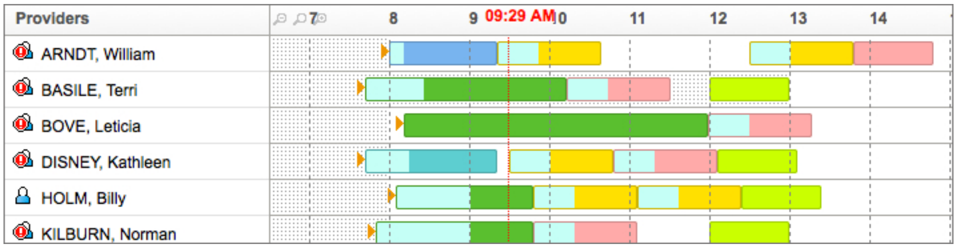


In the example above:

- **Zoom In/Out**: Under **View**, slide the slider to the right to zoom in and to the left to zoom out. Then click Fit.
- **Time Scale**: Shows the distribution of time and activities over the hours of the workday.
- **Current Time**: The current time is represented by a dotted red line. You can move your mouse along the time scale to identify specific times that an activity started or ended.
- **Activation Time**: The orange triangles at the beginning of each shift represent the actual times that resources activated their routes.
- **Off Time**: The grey blocks of time at the beginning and end of each route represent time off based on the hours set in the resource's calendar.

The colors indicate the status of each activity. Pending (and on time) activities are yellow, while green means the activity has started. Pink indicates a risk that the resource will now be late. These colors are consistent from one view to another as well as on the resource's mobile device.

An exclamation point on a resource silhouette indicates an alert.

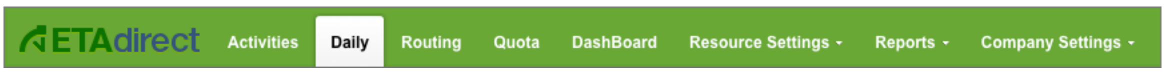


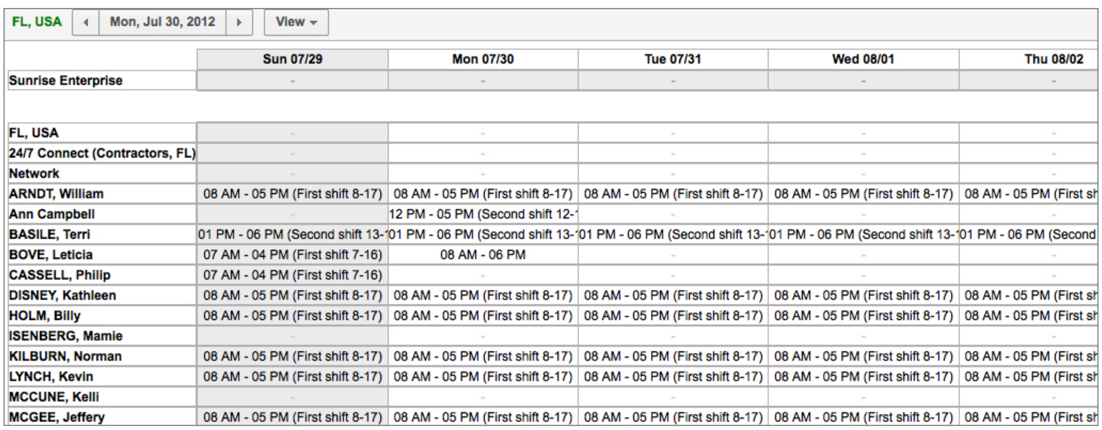
Both routes shown above include activities that are currently in jeopardy.

Daily View (Calendar)

The **Daily View** helps dispatchers or managers manage resource calendars efficiently. It provides a weekly calendar snapshot for the selected resource, bucket or group.

You can view a separate calendar by day for each resource or you can view a calendar for the entire group or bucket as shown below.

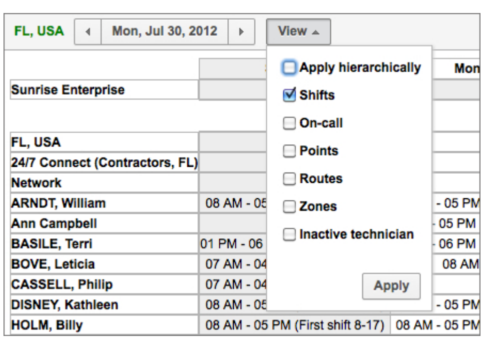




FL, USA | Mon, Jul 30, 2012 | View

	Sun 07/29	Mon 07/30	Tue 07/31	Wed 08/01	Thu 08/02
Sunrise Enterprise	-	-	-	-	-
FL, USA	-	-	-	-	-
24/7 Connect (Contractors, FL)	-	-	-	-	-
Network	-	-	-	-	-
ARNDT, William	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First sh
Ann Campbell	-	12 PM - 05 PM (Second shift 12-1	-	-	-
BASILE, Terri	01 PM - 06 PM (Second shift 13-1	01 PM - 06 PM (Second shift 13-1	01 PM - 06 PM (Second shift 13-1	01 PM - 06 PM (Second shift 13-1	01 PM - 06 PM (Second
BOVE, Leticia	07 AM - 04 PM (First shift 7-16)	08 AM - 06 PM	-	-	-
CASSELL, Philip	07 AM - 04 PM (First shift 7-16)	-	-	-	-
DISNEY, Kathleen	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First sh
HOLM, Billy	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First sh
ISENBERG, Mamie	-	-	-	-	-
KILBURN, Norman	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First sh
LYNCH, Kevin	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First sh
MCCUNE, Kelli	-	-	-	-	-
MCGEE, Jeffery	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First shift 8-17)	08 AM - 05 PM (First sh

Use the checkboxes on the View drop-down to display additional information in the Daily calendar view.

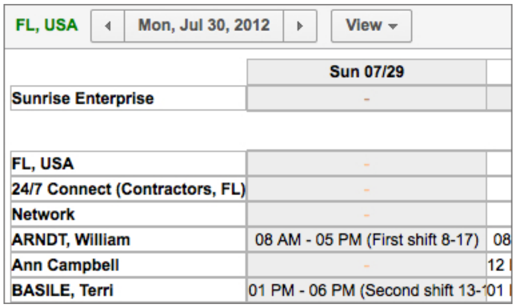


Options available in the View drop-down:

- **Apply hierarchically:** Shows all data within the hierarchy.
- **Shifts:** The shift(s) in which the resource is working.

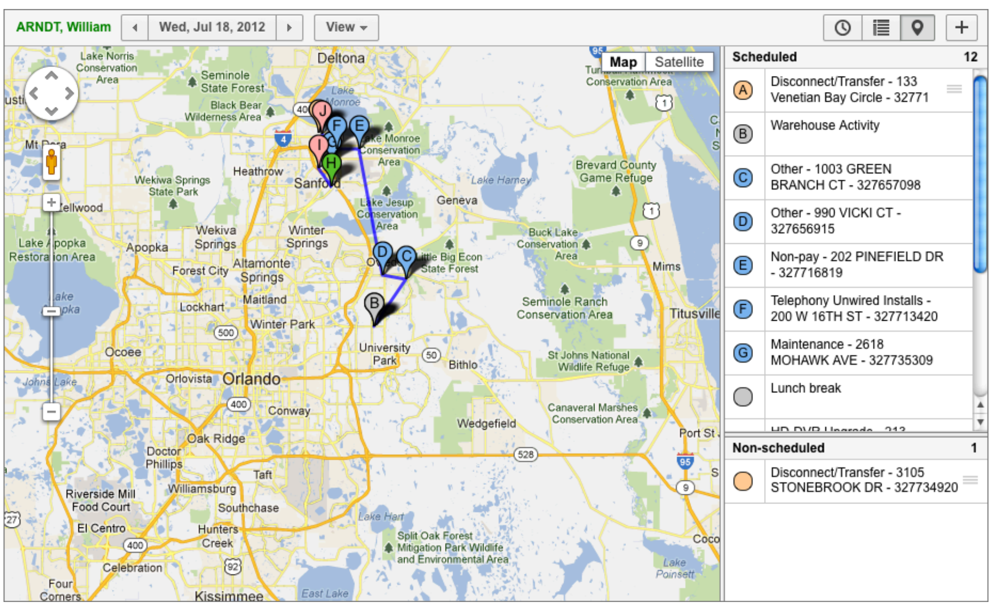
- **On-call:** Filters out resources available for on-call activities, if used.
- **Points:** Displays the points available during that shift, if used.
- **Routes:** If Routes is checked, then the Daily view displays two numbers underneath each day of the resource's calendar. The first number indicates the number of pending activities for the day and the second number indicates the number of total activities for the day.
- **Zones:** This shows the Work Zones that a resource is able to work in for the given day.
- **Inactive: Technician** This is used if you are viewing a group or bucket. When checked, it displays resources that have the week off for vacation, leave of absence, etc.

The Daily screen has the following components:



Map View

The **Map** tab displays the day's activities tableed on a map. Activities for the selected resource appear on the map in the center of the screen and are also displayed in a chronological list on the right side of the screen.



The default display in Map view is not a driving route based on actual streets. Instead, it is a direct path from one point to the next.

Map view uses the same color codes as the other views. See **Color Codes in the Views** for more information.

Map view displays the activities for addresses that Google can find. If Google cannot find the address, the activity appears in the list with either a question mark or a minus (-) sign next to it. Resolved addresses are assigned either a letter (as shown above) or a plus (+) sign.

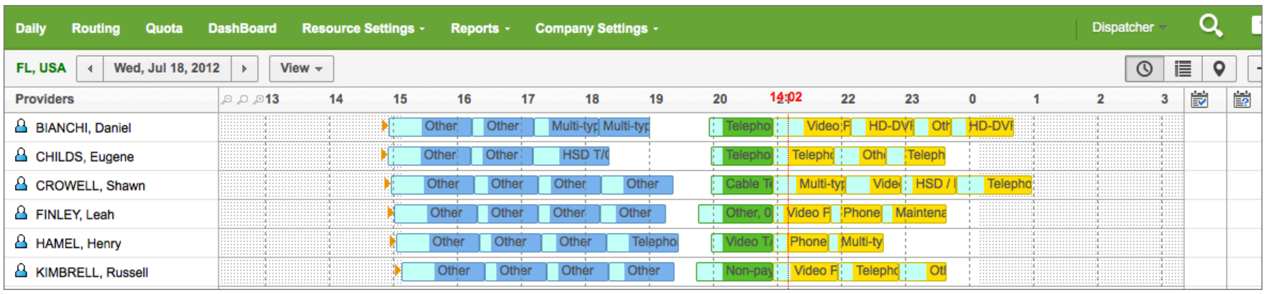
Viewing Resources and Activities

You can use ETAdirect to identify, at a glance, the location of your resources and the status of their routes. ETAdirect provides three different ways to view this information:

- **Time View:** A Gantt table that displays the activities for the selected resource, group, or bucket in timelines, with activities shown as blocks of time.
- **List View:** A chronological list of the day's activities for the selected resource, group, or bucket. Activities are ordered by estimated start time.
- **Map View:** A map that shows the day's activities.

Viewing Resources and Activities in Time View

Time view is useful when you want to check the status of the day's activities for an entire group or bucket.



Time view is a Gantt table that displays the activities for the selected resource, group or bucket in timelines with the activities shown as blocks of time. The red vertical line indicates the current time of day.

- Any activity in the grey area falls outside the resource's workday.
- Green activities have been started.
- Arrows indicate that routes have been activated.

Individual activities are color-coded for status so that you can quickly tell those that are on time, as well as those that are running behind and in danger of missing their service window. The resource's working hours are clearly marked in white so that you can see when an activity falls outside the work day.

For more details about the Time view screen, see **Time View**.

Viewing Resources and Activities in List View

List view is a chronological list of the day's activities for the selected resource, group or bucket.

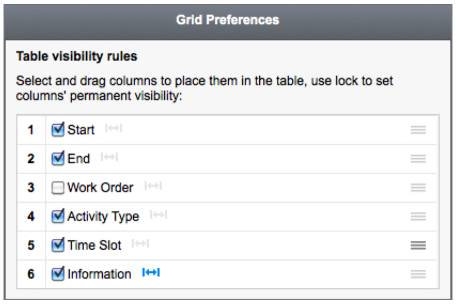
Activities are ordered by estimated start time. This view provides a detailed view of the resource's schedule in one screen. It is useful when you want to see both the daily schedule and the related details all at once.

Customizing the List View

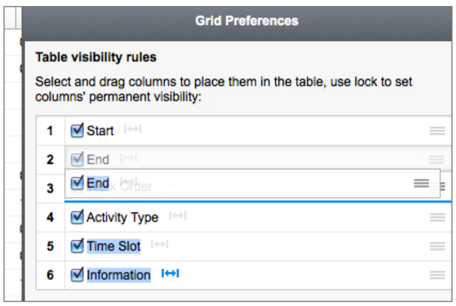
You can customize the organization of the columns in **List** view so that it is easier to read and understand. Specifically, you can rearrange as well as show and hide the columns.

Follow these steps to customize list view:

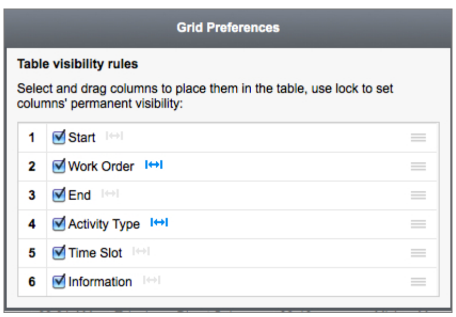
1. Open **List** view and click the wrench button in the upper right corner. **The Grid Preferences** box displays.



2. Check the boxes for the columns you want to see. To hide a column, clear the checkbox.
3. Use drag and drop to change the order of the columns. A blue vertical bar indicates the current location.



4. Use the blue double-headed arrow to disable word wrapping in a particular column.



Viewing Resources and Activities in Map View

Map view displays the day's activities on a map.

Activities for the selected resource appear on the map in the center of the screen and are also displayed in chronological order on the right side of the screen. This is useful when you want to see the activities in relation to the route. Map view shows you the distribution of activities within a geographical region so that you can picture how the resource will get to each stop on the route.

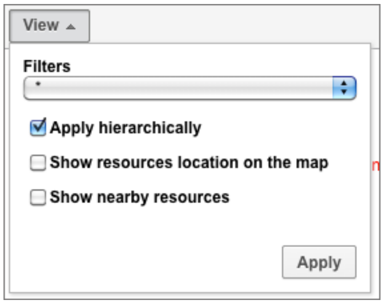
For more details, see **Map View**.

Viewing a Group or Bucket in Map View

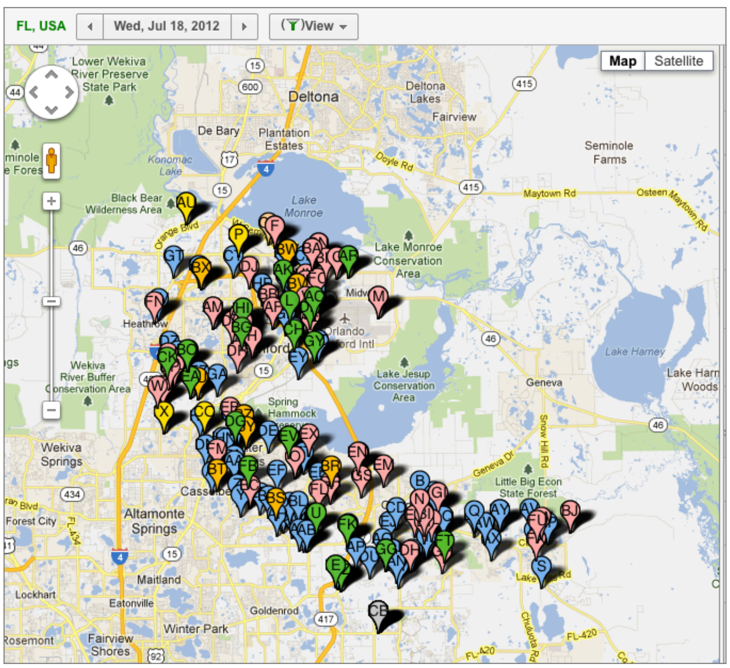
You can see the location of all the resources for a particular Group or Bucket in Map view.

To view the location of a Group or Bucket:

1. Select the group or bucket from the **Resource Tree**.
2. Click the **Map view** button.
3. Click the **View** Button. View The View Menu opens.
4. Select the **Apply Hierarchically** check box.



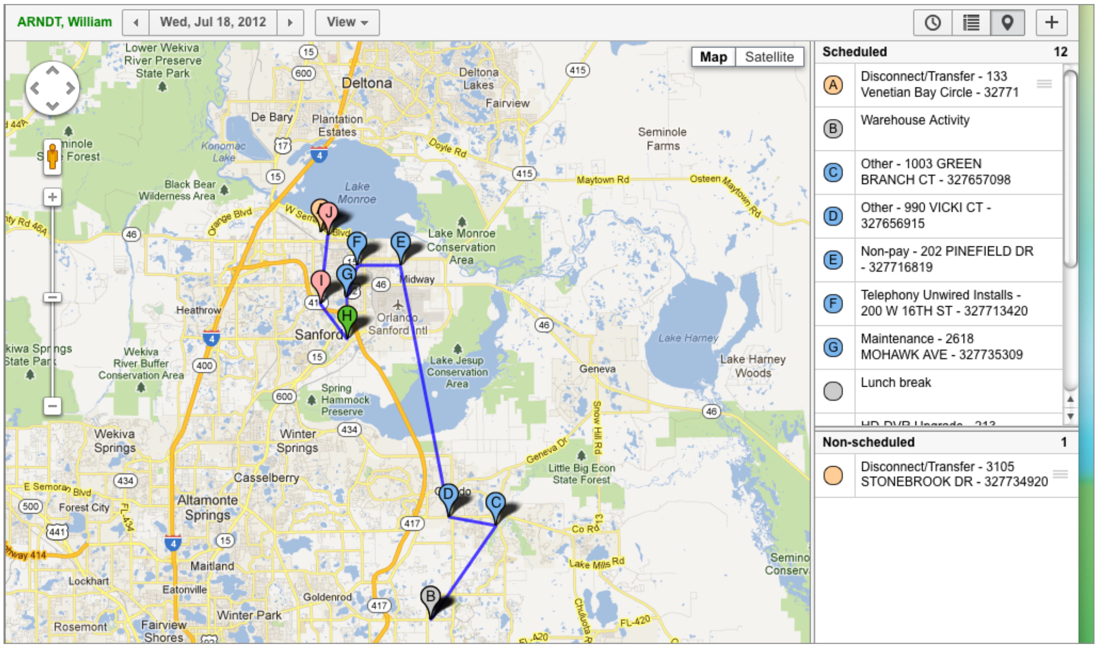
5. Click **Apply**. The map displays and shows the location of all of the activities on all of the routes for the resources in the selected group or bucket.



Viewing an Individual Resource in Map View

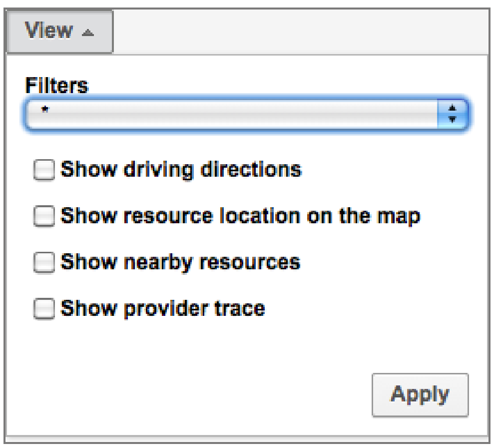
When viewing an individual resource in Map View, you can see his or her location as well as the location of nearby resources. ETAdirect plots the suggested route, provides driving directions and traces the actual route taken by the resource (Provider Trace).

1. Select the resource from the **Resource Tree**.
2. Click the **Map view** button. The map shows you the resource's route as well as a list of both scheduled and non-scheduled activities for the day.

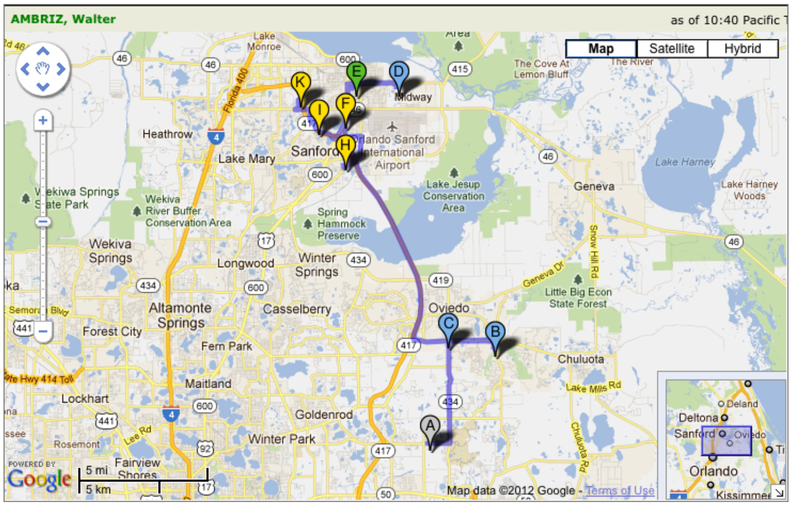


3. Click the **View** Button. 

The View Menu opens.



4. Click the box next to **Show Driving directions**. The screen resets and then displays the suggested route.



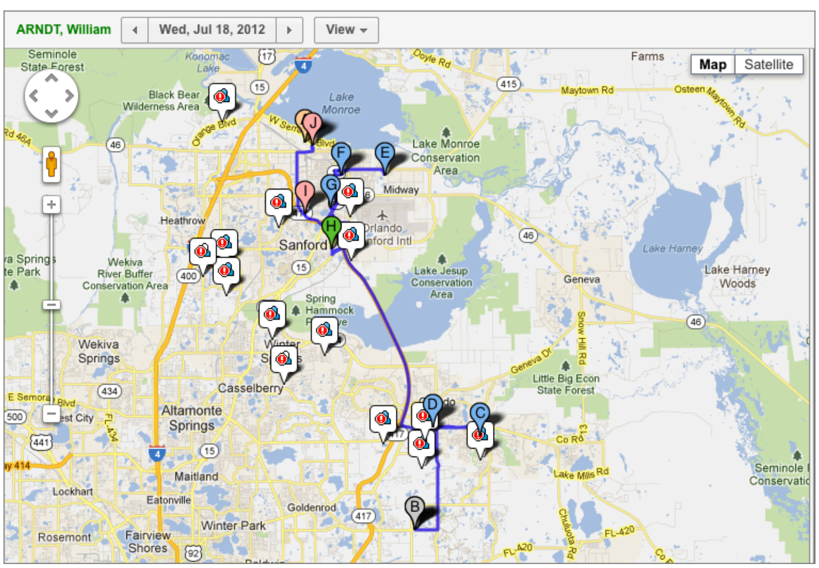
5. If SmartLocaction is enabled, you can see the route actually taken by viewing the **Provider** Trace option. Click the box next to **Show Trace** in the view menu. The screen resets and the route is indicated by dots.

   See **SmartLocation User Guide** for detailed instructions about this feature.

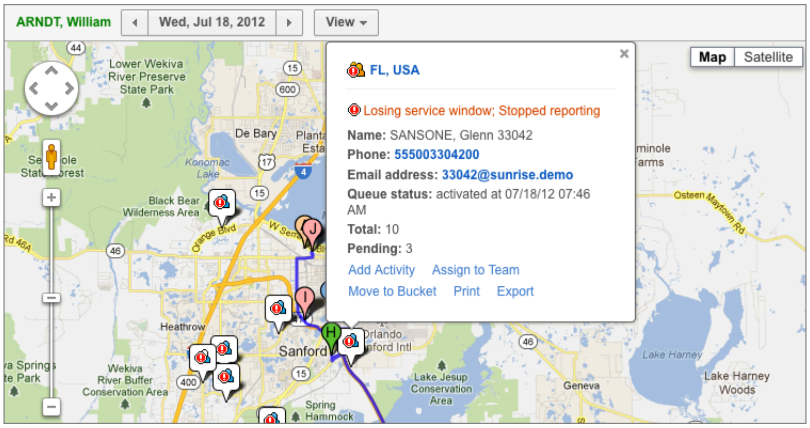
Viewing Nearby Resources in Map View

If you want to move an activity, you can view nearby resources to find someone who can take the job.

1. Select the resource from the **Resource Tree**.
2. Click the **Map view** button . The map shows the resource's route for the day and a list of the scheduled and non-scheduled activities.
3. Click the **View** Button. View The View Menu opens.
4. Click the checkbox next to **Show Nearby Resources**. The screen resets to display the other reosurces in the area.



5. Click the icon to see details about the resource including name and contact information.

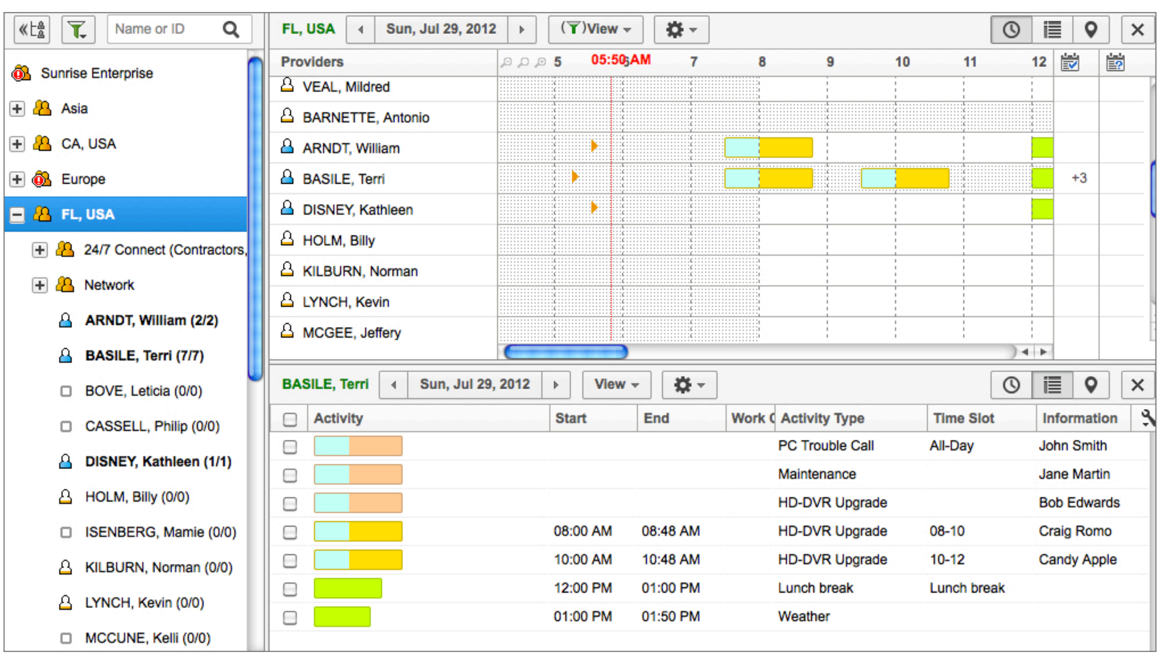


Viewing Resources and Activities in Two Panels

Both the upper and lower panels within Time View have their own controls and can be operated independently. Since the Resource Tree can be accessed independently from each panel, you can compare availability in two sections of the Tree at the same time.

1. Open the **Resource Tree**.
2. Click the resource that you want to view in the top panel. The resources's schedule displays in that Work Area.
3. Click the Plus icon to open the bottom panel.
4. Note that the initial display in the bottom panel reflects the top panel.
5. Use the search fields and horizonal and vertical bars to manipulate the display in each panel to meet your needs.
6. Use the bottom panel to drill down while retaining the "bigger picture" in the upper panel (as shown below) or operate the two panels independently, i.e., by simultarneously investigating availability in more than one section of the tree.

Tip: If you want to find an available resource for an unassigned activity, view the bucket in the top panel and the resource's unscheduled activities in the bottom panel.



Menu Tabs

The menu tabs that run across the top of your screen contain a number of functions that can be used to manage your workforce.

Dispatchers typically perform most of their work in the Activities tab. The items you see listed under the tabs for your company's configuration may be different based on your profile in ETAdirect.

Activities: Accesses the activities for the selected resource. Most of the dispatcher's daily tasks can be performed in this tab.

Daily: Access resource calendars and shift schedules.

Routing: Access features used to set up routing. For detailed information about **Routing**, see the SmartRouting User Guide.

Quota: Access features used to calculate capacity and manage quota in ETAdirect. For detailed information see the section on *Capacity-based Quota Management* in the SmartCapacity User Guide.

Dashboard: Access the Dashboard to view graphic displays of reporting results.

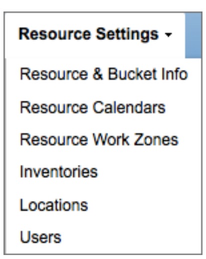
Resource Settings: Access features that control administrative functions, such as changing a password, viewing a resource's information and work zones, and viewing inventory. See **Resource Settings Tab** for more information.

Reports: Access the reports configured for your company. See **Reports Tab** for more information.

Company Settings: Access the configuration menu for ETAdirect. Many of the features and screens displayed are used only by TOA Support Representatives to configure your environment.

Resource Settings Tab

The Resource Settings tab contains a variety of menu items related to the resources in the field. The items that you can see on this tab depend on your profile.



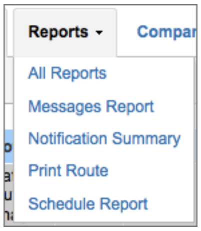
The Resource Settings tab includes:

- **Resource & Bucket Info:** View and manage resources, buckets and groups. Only Administrative users can add new resources.
- **Resource Calendars:** Set up recurring resource calendars. This feature should not be used to set up one-time schedule adjustments (vacations, training, etc.). The Daily tab should be used for schedule adjustments that do not recur.
- **Resource Work Zones:** Assign areas, individual resources, groups or buckets to particular geographic regions.
- **Inventories:** View the inventory serial numbers assigned to the selected resource.
- **Locations:** View the **Start** and **End** locations as well as **Home Zone Centers** (if applicable) of selected resources on a day-by-day basis.

- **Users:** Create and manage individual user accounts.

Reports Tab

The **Reports** tab provides access to a number of reports that gather information about your mobile workforce.



The following list defines the menu selections under the Reports tab.

- **All Reports:** View a list of all available reports. Reports can be run for the resource(s) selected in the **Resource Tree**. In addition, the Actions pane enables you to apply filters based on the type of report being run. You have the ability to print the report or export the data to a CSV file.
- **Messages Report:** View the messages sent through the notification engine for a specfic group, bucket or resource over a selected time period.
- **Notification Summary:** View a summary of the notifications sent to resources.
- **Print Route:** View the routes of resources selected from the Resource Tree. The Actions pane contains options to Print or Export selected routes. The print and export route options in both List and Time view.
- **Schedule Report:** View a list of the reports that have been set up to run on a scheduled basis.

For detailed information about individual reports, see the **SmartReporting User Guide**.

Lower Work Area Panel

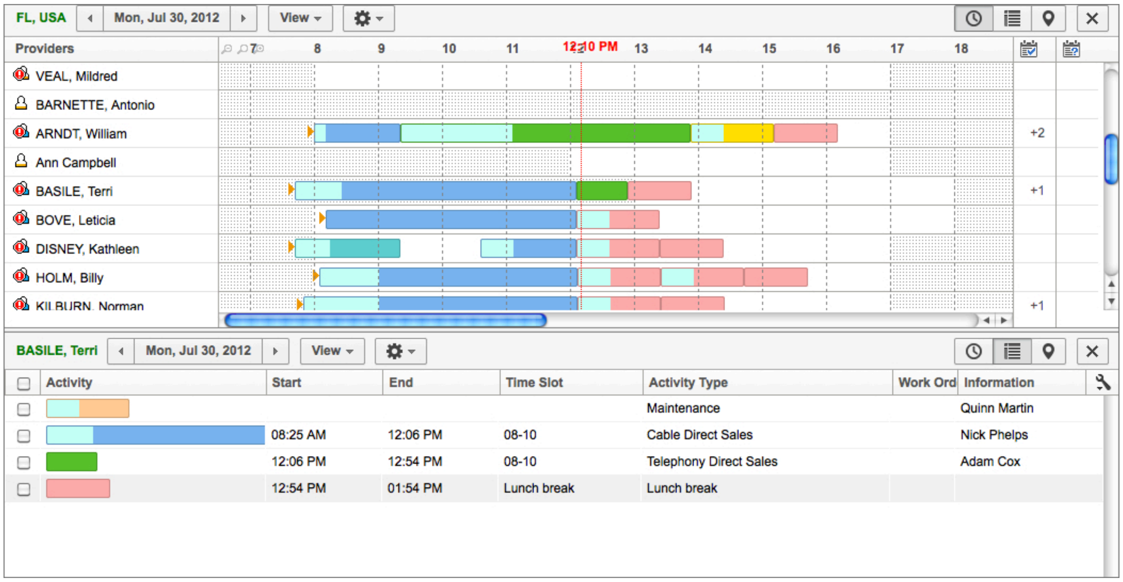
The lower work area panel can display drill-down details for entities selected from either the upper panel or directly from the Resource Tree.

When used as a drill-down, the lower panel can display route information for any resource, bucket or group selected in the upper panel. For example, if a resource is selected in the upper panel, the lower work area panel can display the scheduled or non-scheduled activities for that resource.

Since the Resource Tree can be accessed directly from the lower work area, that panel can also be used to search and display information independent of the display in the upper panel. This facilitates detailed comparison of resource availability in two panels.

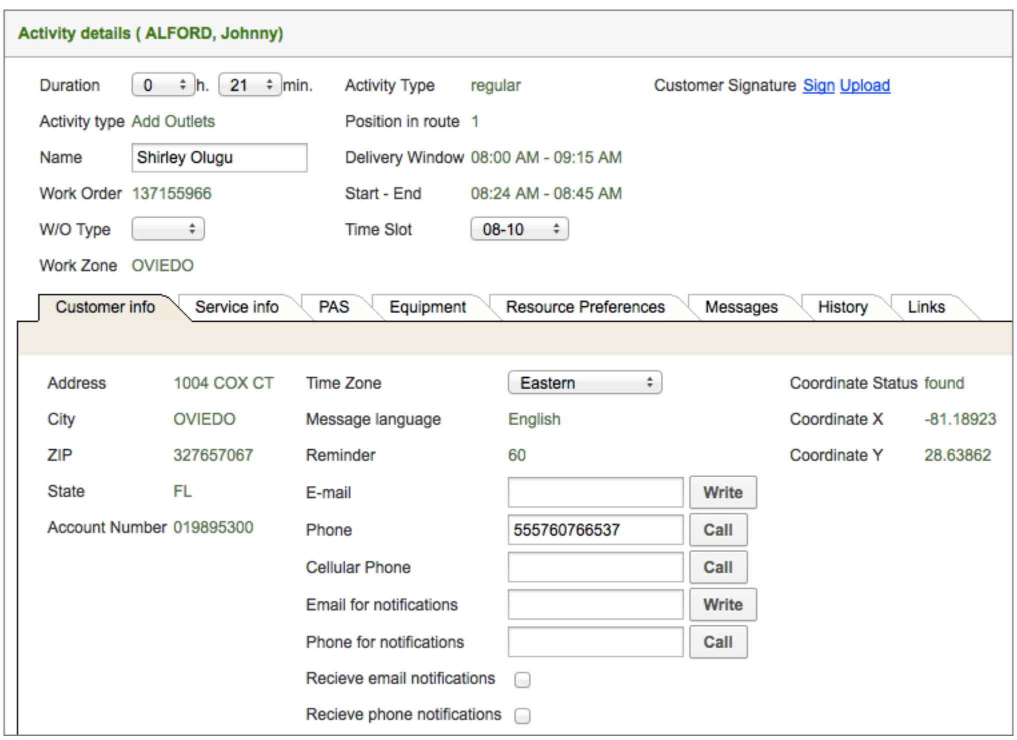
Follow these steps to view the lower panel screen:

1. Navigate to Time view.
2. Select an entity from the Resource Tree.
3. View the resources displayed in the upper panel.
4. Select a resource from the upper panel.
5. Click the [+] to view that resource's schedule in the bottom panel.
6. **Optional:** Drag and drop the display in the lower panel to the upper panel.
7. **Optional:** Repeat steps 2-4 in the lower work area to select and view the schedule of a second resource in the bottom panel.
8. **Optional:**Compare the two panels to identify the resource that meets your requirements.



Activity Detail Screen

The Activity Detail screen provides detailed information about an activity. The tabs that run across the lower portion of the screen organize these details based on the needs of your cofiguration.



The lower section of the activity details screen is a set of tabs containing specific information about Preferences, Messages, History and Links. This section can be configured to your company's requirements and may include additional custom tabs, such as Customer and/or Service Info, Equipment, Inventories and others designed to meet the special needs of your configuration.

Equipment Tab

For configurations that use inventory, the **Equipment** tab displays the serial numbers of any equipment that is either installed at the service address or required to complete the activity. This screen can also be used by the dispatcher to change (increment or decrement) equipment on behalf of the resource working at the service location.

The Equipment Tab may include the following information:

- **Serial Number:** A unique number that identifies a piece of equipment and (usually) its manufacturer. A house icon indicates the equipment is located on the customer's premises; a truck icon indicates it is in the resource's truck.
- **Pool:** A grouping of inventory by location and/or condition, such as installed/deinstalled. The term "pool" is fluid and may sometimes be used to indicate ownership, such as a resource pool.
- **Actions:** Links for the types of actions that may relate to this specific inventory. These links will vary based on your company's configuration.

Resource Preferences Tab

The **Resource Preferences** tab lists any preferences or restrictions regarding the resource that should complete this activity.

Resources listed here will be in one of three categories

- Required (only one of these resources can be assigned the job),
- Preferred (if no Required resources are listed, then Preferred resources will have priority over everyone else) or,
- Forbidden (resources that cannot be assigned to the activity).

Messages Tab

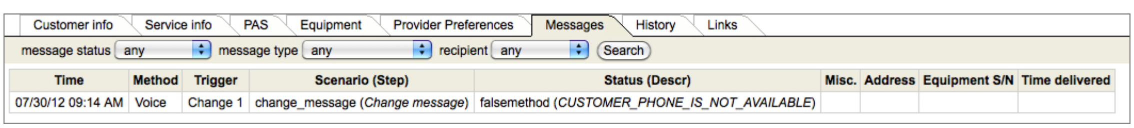
Messages that can be seen in this tab include:

- **Notification** messages sent to the customer and/or resource.
- Messages received from an external billing system.

You can filter the types of messages that are visible by using the **Message Status**, **Message Type**, and **Recipient** drop-down menus.

Follow these steps to view all of the messages associated with this activity:

1. Select the word "any" from a drop-down to view all messages.
2. Click **Search**. The screen resets, displaying all messages.



Time: Indicates the day and time that the message was issued. If it is in the future, then the time listed indicates when the message will be sent to the customer.

Method: The method by which the message is sent. For example:

- Voice – telephone or voice call.
- SMS – SMS text message.

Trigger: Indicates the previous action that triggered the message.

Scenario (Step): Details on the message sent.

Status (Description): Indicates whether the message was successfully sent or not. If a message was successfully sent, this column will display “delivered” or “sent.” If it was not the message will indicate “failed” and a reason will be included.

Address: The phone number or email address where the message was sent. If this column says ‘external system’, it means the message was sent to the external billing system.

Equipment S/N: The serial number of any equipment referenced.

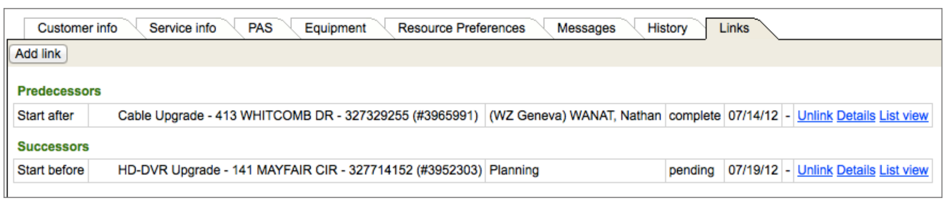
Time Delivered: The time the message was delivered.

History Tab

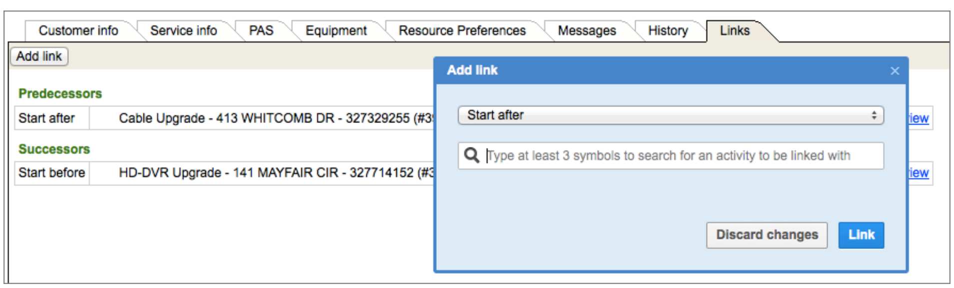
This tab displays all the events associated with this activity from the time it was received through completion. This is not an address history but a record of all changes and movement of the activity, time stamped with the user ID. This tab is useful for dispatch when researching issues or problems with an activity.

Links Tab

Some activities depend on the timing of others that may be performed by different resources in a different location. For example, before one resource can activate a telephone, another resource that he or she has never met may have to flip a switch at a remote location. The options under the **Links** tab can enable these activities to be connected and sequenced chronologically.



If you click **Add link**, then you will have the option to link that activity to another in chronological order.

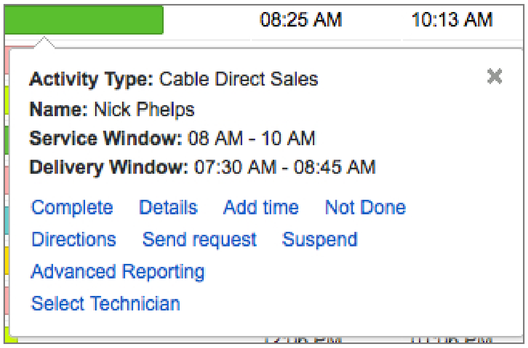


Search for the other activity by selecting a search option from the drop-down list and entering at least three characters.

Find out more about **Linking Activities**.

Hints

Hints are pop-up windows that display additional information about the activity or resource that you select.



Filters

You can use filters in the search windows to narrow your search results. Filters are also used in routing plans to predefine the information that routing uses to distribute activities to resources.

Creating a Filter

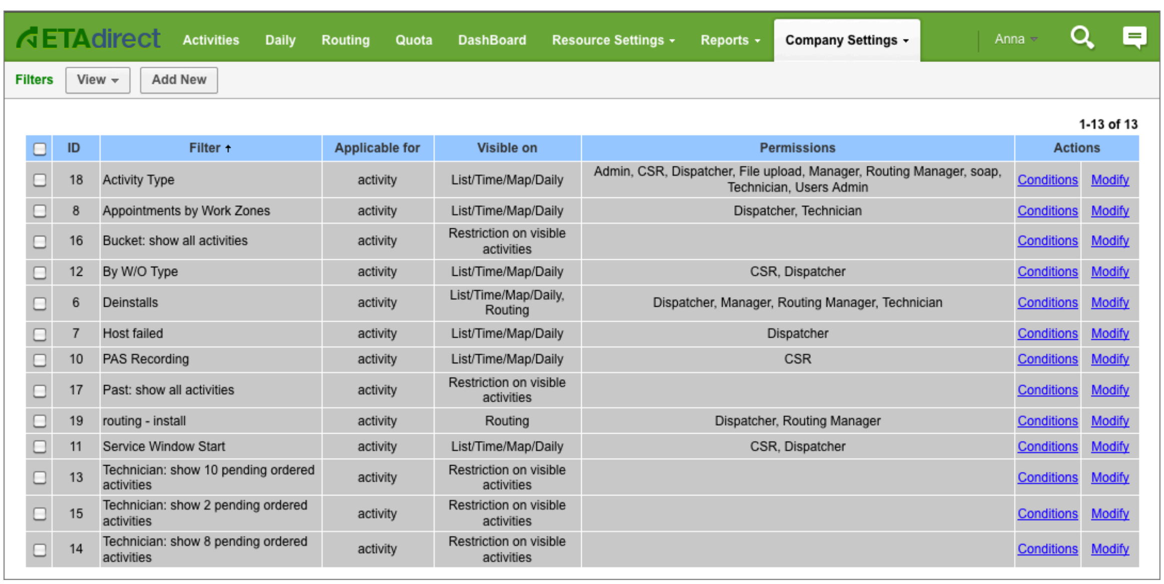
ETAdirect is equipped with several standard filters that you can use to narrow down search results. You can also create custom filters to fine-tune the search process.

For example, suppose that managers need to be able to view a list of completed activities where the customer could potentially be a “detractor” of the business. The conditions for this would be that the customer entered a score of 2 or less on their **PAS (post activity survey)** for which this question: “Based on this visit, how likely would you be to recommend our company to friends or family?”

Adding a Filter to the Filter List

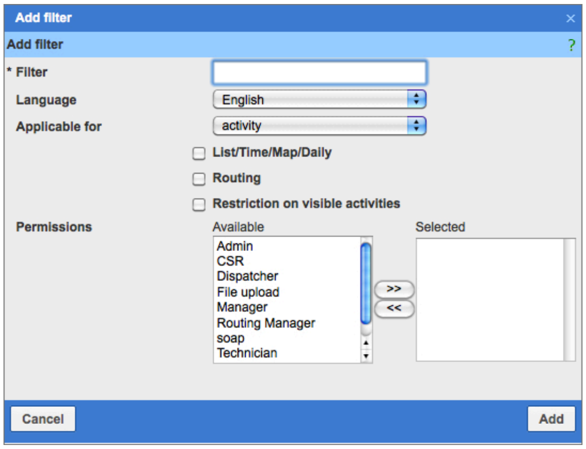
From the **Company Settings** menu. Click the **Filters** drop-down list option.

1. Click **Add new** one of the buttons in the upper left corner of the screen above the list of filters.



	ID	Filter	Applicable for	Visible on	Permissions	Actions	
☐	18	Activity Type	activity	List/Time/Map/Daily	Admin, CSR, Dispatcher, File upload, Manager, Routing Manager, soap, Technician, Users Admin	Conditions	Modify
☐	8	Appointments by Work Zones	activity	List/Time/Map/Daily	Dispatcher, Technician	Conditions	Modify
☐	16	Bucket: show all activities	activity	Restriction on visible activities		Conditions	Modify
☐	12	By W/O Type	activity	List/Time/Map/Daily	CSR, Dispatcher	Conditions	Modify
☐	6	Deinstalls	activity	List/Time/Map/Daily, Routing	Dispatcher, Manager, Routing Manager, Technician	Conditions	Modify
☐	7	Host failed	activity	List/Time/Map/Daily	Dispatcher	Conditions	Modify
☐	10	PAS Recording	activity	List/Time/Map/Daily	CSR	Conditions	Modify
☐	17	Past: show all activities	activity	Restriction on visible activities		Conditions	Modify
☐	19	routing - install	activity	Routing	Dispatcher, Routing Manager	Conditions	Modify
☐	11	Service Window Start	activity	List/Time/Map/Daily	CSR, Dispatcher	Conditions	Modify
☐	13	Technician: show 10 pending ordered activities	activity	Restriction on visible activities		Conditions	Modify
☐	15	Technician: show 2 pending ordered activities	activity	Restriction on visible activities		Conditions	Modify
☐	14	Technician: show 8 pending ordered activities	activity	Restriction on visible activities		Conditions	Modify

2. Complete the fields in the **Add Filter** pop-up box



3. Use the list below to complete the fields.
   - **Filter:** Enter the name of the filter. This name is what users will see when they select **Filters** drop-down list.
   - **Language:** Select the appropriate language from the drop-down list.
   - **Applicable for:** The Applicable for field indicates the type of record that the filter will apply to. There are two choices: **Activity** and **Technician**.

   Check the checkboxes to indicate the tabs where you would like the new filter to be visible:

   - **List/Time/Map/Daily:** If this box is checked the filter appears in the Filters drop-down list in the Actions pane.

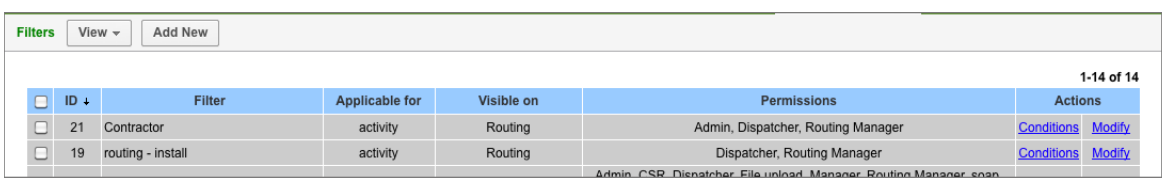
     Routing: If this box is checked the filter appears in Routing Filters list.

     Restriction on visible activities: Check this box to prevent activities from appearing if routes have not been activated or the work day has not yet begun. It also provides the ability to “hide” some activities in buckets.
   - **Permissions:** Select the user profiles that have access to this filter. For example, if this filer is used for routing, the profile for the person who performs routing must have permission to access the filter.
4. Click **Add**. The new filter appears in the Filters list.

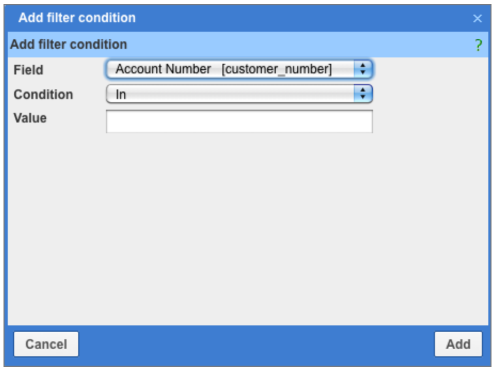
Adding a Filter Condition

Conditions are used to define the activity you are seaching for.

1. On the **Filters** screen, find your filter and then click **Conditions** link in the actions column.



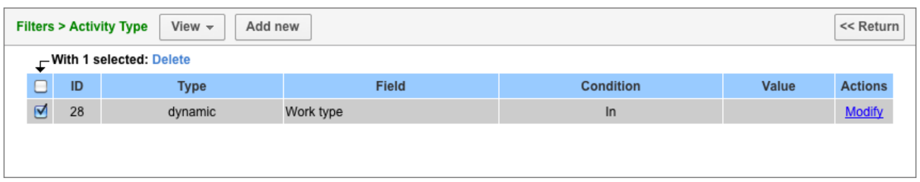
2. Click **Add New** at the top of the screen. The **Add filter condition** dialog box appears.
3. Use the following list to fill in the fields in the **Add filter condition** box.
   - **Field:** This is a list of all of the criteria to choose from relating to activities (or resources) from which the filter can be based. It is possible to mix and match multiple criteria.
   - **Conditions:** The options here represent how the field selected above relates to the Value entry.
   - **Value:** This represents the specific entry for the activity **Field** selected above.
4. Once the condition is complete, click the **Add** button.
5. Navigate to the Work Area and verify that the filter is listed in the View drop-down menu.



Deleting a Filter Condition

When a filter condition is no longer needed, you can remove it from the ETAdirect system. Follow these steps to delete a filter condition:

1. Click the **Company Settings** tab and select **Filters** from the drop-down menu.
2. Find the filter that has the condition you want to delete from and click the **Conditions** link.
3. Check the checkboxes next to the condition that you want to delete.

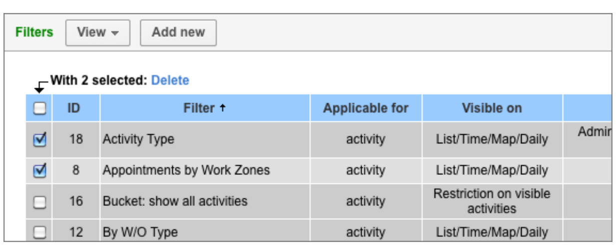


4. Click **Delete** above the list of conditions.
5. Click **OK**.

Deleting a Filter

When you do not need a filter anymore, you can remove it from the ETAdirect system. Follow these steps to delete a filter:

1. Click **Company Settings**and select **Filters** from the drop-down menu.
2. Check the checkboxes next to the filters that you want to delete.
3. Above the list of filters, click **Delete**.



4. Click **OK**.

Alerts

Alerts are set up in ETAdirect to notify you of possible situations that may require intervention. They also provide information that can help you make decisions.

Activity Alerts

ETAdirect provides alerts to guide you as you move activities. The following alerts are available:

Overtime Alert: This alert notifies you that the estimated completion time of the activity extends beyond the end of resource's working day.

Soft Skill Mismatch Alert: This alert displays when you move an activity to a resource that does not have the preferable qualification level of an activity skill.

Work Skill Mismatch Alert: This alert displays when you move an activity to a resource that does not have the required and preferred qualification level of an activity skill. Depending on your settings, the **Work Skill Mismatch Alert** either prevents you from moving the activity, or gives you the option to move it or to cancel the move.

After you read the alert, click **OK** to move the activity or press **Cancel** to cancel the move.

Resource Tree Alerts

Resource Tree alerts give you information about the status of the resource or the route. Alerts appear next to the resource icon in the Resource Tree.

Alerts are displayed for all parent items in the **Resource Tree** up to the root resource (bucket/group). If the root resource has an exclamation mark, this means that at least one child resource has an alert. After the issue is resolved, all of the related alerts are removed from the Resource tree.

 Warning that there is a problem with the resource or the route. Possible reasons:

- **Resource** has not activated his/her route on time (Not Activated in Time).
- A pending activity is very close to the end of the service window and resource is likely to be late (Losing **Service Window**).
- Pending activity has an **ETA** in the past. **Resource** is not reporting (Stopped Reporting).

  Pointing to a resource's icon displays a 'Hint' providing a list of all warnings. Dispatch should reach out to the resource to resolve.

 Resource is not configured and cannot be used properly. Possible reasons:

- Time zone is not set correctly for this resource.
- Calendar is not configured properly for this resource.

  Alert that there is a problem with one or more of the resources located within this bucket / group. Possible reasons:

- One or more resources have not activated his/her route on time.
- One or more pending activities is close to the end of the service window and resource is likely to be late.
- One or more pending activities has an **ETA** in the past. Resource is not reporting.

Pointing to a bucket/group's icon displays a 'Hint' providing a list of all warnings.

Follow these steps to view the details of the alert, click on the icon next to the resource name. The alert details are diaplyed in a **Hints** box.

The following Resource Tree alerts are available in ETAdirect:

- **Losing service window:**This alert can mean one of two things:
  - The activity is scheduled after the end of service window. "Losing Service window"
  - The activity has not been started within the predefined amount of time before the service window expires.
- **Stopped reporting:** This alert indicates that the activity did not start on time. It appears for pending ordered activities in activated queues that belong to the current working day.

- **Not activated on time:** This alert indicates that the resource did not activate his or her queue on time.
- **Misconfigured calendar:** This alert appears if a resource's calendar is configured incorrectly, for example when the resource is assigned two working calendars.
- **Smart GPS Alert:** This alert indicates that the current location for a resource has not changed in a predefined amount of time.

Chapter

3

Managing Users

Topics:

- **Adding a User**
- **Adding a User for a Resource that Already Exists**
- **Activating, Deactivating, or Deleting a User**
- **Unlocking a User Account**
- **Changing User Account Settings**

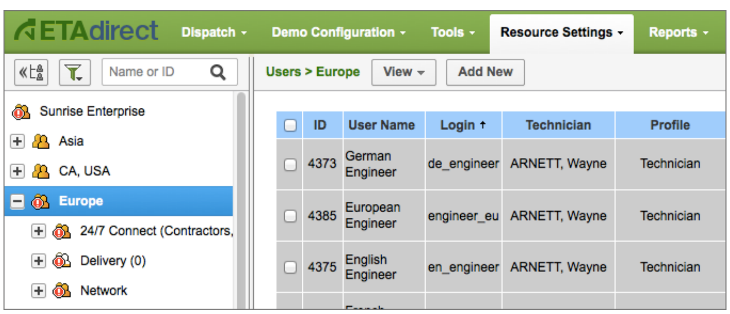
You can set up users and maintain their accounts through the Users screen that opens from the **Resource Settings** drop-down menu. Much of the information that you enter will be standard, based on your company's login and password policies, but some will be unique to the user and to the role they will play in your configuration.The options included in this section of the Guide include one-time activities as well as those that are updated periodically to conform to changes in the user's role as well as company policy. For example, if users persist in attempting to login with an incorrect password, they will be locked out of their accounts. This is the section of the guide you will turn to for instructions on unlocking the account and resetting the password.

Adding a User

Before the members of your team can use ETAdirect, they must have user accounts.

Follow these steps to add a user account to the Resource Tree in ETAdirect:

1. Select the bucket or group in the Resource Tree that you want to add the new user to.
2. Click **Resource Settings** and select **Users** from the drop-down menu item. The **User** table displays in the work area as shown below.



3. Click **Add new**. The **Add new user** window displays add window.
4. Complete the fields on the form:

   - **Self-Assignment:** Check this checkbox to enable this resource to add new appointments to his or her individual route.
   - **Technicians:** The group or bucket that the resource is in. The option you select here determines which resources, groups, and buckets the resource can view in the ETAdirect system.

     This field is automatically populated with the group, or bucket that you selected in the first step, but you can add or change the list of viewable resources, groups, and buckets here.
   - **Profiles:** Choose the profile or profiles that you want to assign to this user. Profiles determine which tasks within the system this resource will have access to.
   - **Managed Profiles:** Choose the profiles that this user has permission to modify. When a user changes a profile, that change is applied to all users who have been assigned that profile.
   - **User name:** Type the user's fist name and last name.

- **Login:** Type the user's username for ETAdirect username for that user.
- **Status:** Select active or inactive. Active users can use the ETAdirect system. Inactive users cannot use the system.
- **Language:** Select the language that the user sees in the interface.
- **Phone Number:** Type the user's telephone number.
- **Time format:** Choose the time format that the user sees and uses in the display. This can be the either 12-hour format or the 24-hour format.
- **Date format:** Select the date format that the user sees and uses in the interface. Options are month-day-year and day-month-year. The date format controls the display of dates in numeric format.
- **Long date format:** Select the way in which you wish to display the long date to the user. The long date is the date that includes words, for example, Wednesday, February 20, 2013.
- **Time zone:** Select the time zone that the user will see and use in the interface.
- **Password:** Type the password that the user uses to log in to ETAdirect.
- **Confirm password:** Type the password again.
- **Force password change at next login:** Check the checkbox to require the user to create a new password when he or she logs in for the first time.
- **Login Policy:** Select the login policy from the drop-down menu. Login policies are established at installation. They are a group of login rules that you can apply to a user or group of users.
- **Display Profile:** Choose the display profile that you want this user to use. **Display** profiles determine the items that users can see in the interface.
- **API profile:** Choose the API profile that you want to use. The API profile determines which SOAP and file upload interfaces the user has access to.
- **Main resource (resource in Telemetry and Smart Collaboration):** Enter the user's resource ID. This setting establishes the connection between the user and the resource ID.

5. Click **OK**

Note: If this user is also a resource, you must also add a resource in ETAdirect. See **Adding a Resource** for details.

Note: You must assign a user who has self-assignment permission directly to a bucket. Users who can assign activities to themselves cannot be in groups.

Adding a User for a Resource that Already Exists

You must add the user first. See **Adding a User** for details.

Follow these steps to add a resource for a user that already exist:

When you create a resource that needs to interact with the ETAdirect system, you must also create a corresponding user for that resource.

1. Click the resource in the **Resource Tree**.
2. Click **Resource Settings** and select **Users** from the drop-down menu.
3. Click **Add New**. The **User** screen displays. The user's user name appears in the Technicians field.
4. Enter the rest of the resource's information.
5. Click **OK**.

Activating, Deactivating, or Deleting a User

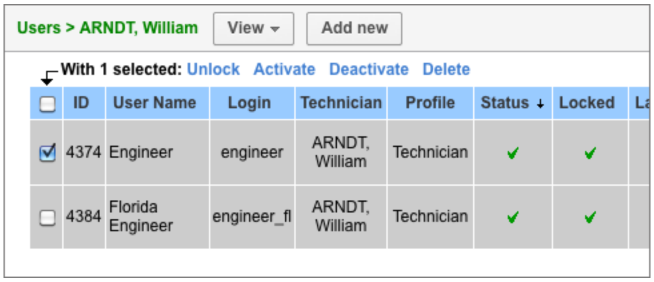
You can control whether a user has access to ETAdirect. When users are activated, they can log in and use the system. Deactivated uses can be re-activated again when needed. Deleted users are no longer available in the resouce tree.

Follow these steps to change a user's status:

1. In the **Resource Tree**, select the user that you want to change the status for.

Tip: You can search for a user in the **Search** field above the **Resource Tree**.

2. Click **Resource Settings > Users**. The **User** screen displays.
3. Check the checkbox next to the user that you want to change the status for.
4. Click the **Activate**, **Deactivate**, or link located above the list of users.



5. Click **OK**.

Unlocking a User Account

When a user tries to log in too many times with the wrong password, that account is locked. You can unlock the account for the user.

If the user forgot their password, you might also have to change their password. See **Changing a User Password** for details. Follow these steps to unlock an account after too many incorrect login attempts:

1. In the **Resource Tree**, select the name for the user whose account is locked.
2. Click **Resource Settings** and then select **Users** in the drop-down menu. The **User** screen displays.
3. Check the box next to the user whose account you want to unlock.
4. Click the **Unlock** link above the list of users.
5. Click **OK**.

Changing User Account Settings

You can update a number of user account settings, including the profile, the display profile and the language. You can also update the resource records that a user can see and manage in ETAdirect.

Follow these steps to change a user's account settings. Follow these steps to change user account settings:

1. In the **Resource Tree**, click on the user's name. Use the Search field above the resource tree to find the user.
2. Click **Resource Settings**and select **Users** in the drop-down menu.
3. The **Users**screen displays. In the Actions column, click **Modify**.
4. The screen displays. Make the changes.
5. Click **OK**.

Chapter
4

Managing Resources

Topics:

- **Searching for a Resource**
- **Finding an Available Resource**
- **Adding a Resource**
- **Moving a Resource to another Group or Bucket**
- **Assigning Work Skills to a Resource**
- **Adding Work Zones to a Resource**
- **Adding a Group to the Resource Tree**
- **Adding a Bucket to the Resource Tree**
- **Assigning a Resource to a Team**
- **Managing Resource Calendars**

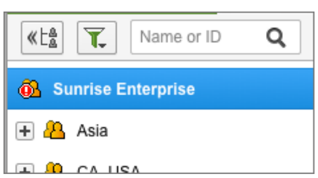
Resources are the people who perform the activities and the items that are paired with those people. Examples of resources include technicians and trucks. You can use ETAdirect to keep track of resources and their activities. The term "resources" can be applied to individuals that perform activities as well the tools and equipment they use.

Searching for a Resource

You can use the search function to find a particular resource or group of resources.

Follow these steps to search for a resource:

1. Type the name or ID in the search field and then click the magnifying glass



Optional: Follow these steps to narrow the results, click the Filter button and select a filter from the drop down list.

Finding an Available Resource

Activities can be added or moved at anytime and resources may sometimes ask for help in completing as activity. ETAdirect offers several different ways to locating an available resource.

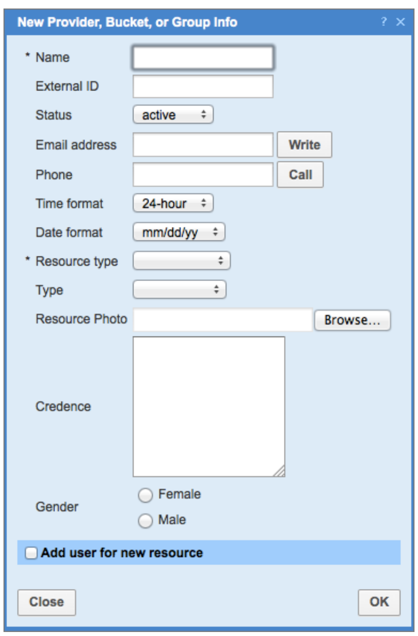
- Let ETAdirect propose available resources. Use the list view to move the activity. ETAdirect will evaluate the activity and propose a number of resources that can take the activity. See **Moving an Activity in List View** for details.
- Identify resources with idle time. Look in the **Resource Tree** to find a resource that does not have a full workload. See **Identifying Idle Time** for details.
- Identify open time slots. Look in Time view for white spaces in schedules. White spaces indicate free time. See **Viewing Resources and Activities in Time View** for details.
- Identify nearby resources. In Map view, turn on the Nearby Resources filter to see resources that are working near the location of the activity that needs to be moved. See **Viewing Nearby Resources in Map View** for details.

Adding a Resource

When an ETAdirect user is also a resource, you must create both a user account and a resource.

Follow these steps to add a new resource:

1. Click the group or bucket in the Resource Tree to which this resource should be added.
2. Click **Resource Settings** and then select **Resource & Bucket Info** from the drop-down menu. The **Resource & Bucket Info** screen displays.
3. Click the **Add child** button.



4. The **New Provider, Bucket or Group** info displays.
5. Use the list below to complete the fields:
   - **Name:** Type the user's name exactly as you want it to appear in the Resource Tree.
   - **External ID:** Enter the ID number from an external system, for example, the employee ID number. These IDs are optional. If you use them, each resource must have a unique ID.
   - **Status:** Select Active or Inactive from the drop-down list. Active resources can use the ETAdirect system. Inactive resources cannot use the system.
   - **Email address:** Type the email address of the resource.
   - **Phone:** Type the telephone number of the resource.
   - **Time format:** Select the time format that the resource will see and use in the interface. Options are 12-hour format and 24-hour format.

- **Date format:** Select the date format that the resource will see and use in the interface. Options are day-month-year and month-day-year.
- **Resource Type:** Select the type of resource. Resource types are custom for each company. Typical resource types are Technician and Truck.
- **Type:**Identify the working relationship that the resource has with your organization. Typical options are Contractor and In-house.
- **Technician Photo:**This field is optional. If this resource is a technician, you have the option of including a photograph.
- **Credence:** Type any additional information about the resource that you want to provide to the customer.
- **Gender:** Click the radio button to identify the resource’s gender.
- **Add user for new technician:** Click this checkbox to continue the process of making this technician an ETAdirect user.

    - Before a resource can use the ETAdirect system, he or she must also have a user account. You can create it here or in a separate step.

    See **Adding a User** for descriptions of each of these fields and for detailed instructions about adding a user in a separate step.

Important: After you add a new resource, you must add the work skills, work zones, and Calendar.

Moving a Resource to another Group or Bucket

You can reorganize resources within the Resource Tree by moving them to different groups or buckets.

Follow these steps to move a resource to another group or bucket:

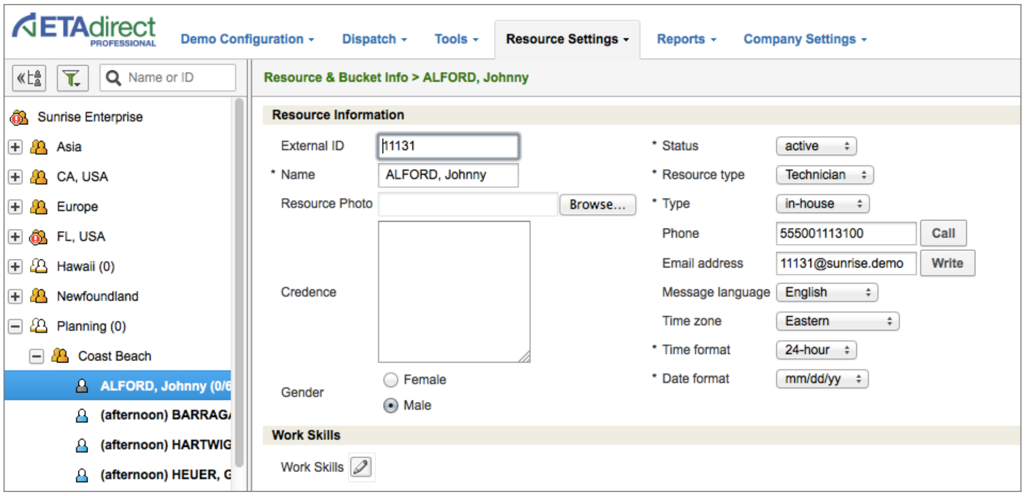
1. In the Resource Tree, select the resource that you want to move.
2. Drag and drop the resource on the group or bucket that you want to move it to. A confirmation window displays.
3. Click **OK**.

Assigning Work Skills to a Resource

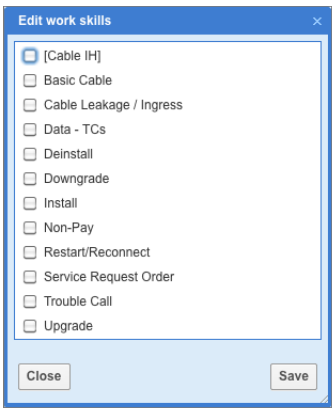
Work skills are the competencies that each resource is qualified to perform. You can assign Work Skills to resources through the Resource & Bucket Information screen.

Follow these steps to assign a work skill to a resource:

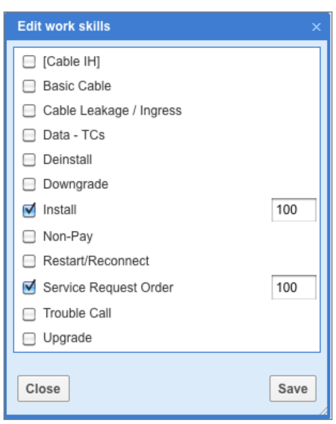
1. In the **Resource Tree,** click on the group or bucket that you want to add the new resource to.
2. Click **Resource Settings** and then select **Resource & Bucket Info** from the drop-down menu. The **Resource & Bucket Info** screen displays.



3. Click the pencil icon in the **Work Skills** section. Check the work skills or work skill groups that this resource is qualified to perform.



4. **Work Skill Group** Assign a qualification level for each work skill using a scale of 1 to 100. A higher number means that the resource is more qualified to perform the task. A lower number means that the resource is less qualified to perform the task.



5. Click **Save**. The resource is now assigned the skills and will be considered for work only if their qualification level meets or exceeds the level in the activity record.

Note: If no individual skills are defined for a resource, then routing interprets that to mean they are qualified to perform all of the skills at the highest qualification level. This is the default setting.

Note: When qualification levels are set for at least one work skill, then the resource is considered to have only the set skill or skills. The resource is not considered for work requiring any of the other skills.

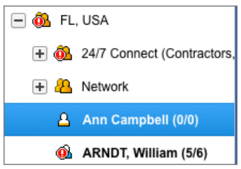
Note: If the ratios in the system conflict, ETAdirect uses the higher ratio. If the work skill group ratio conflicts with the individual work skill ratio, ETAdirect uses the individual work skill ratio.

Adding Work Zones to a Resource

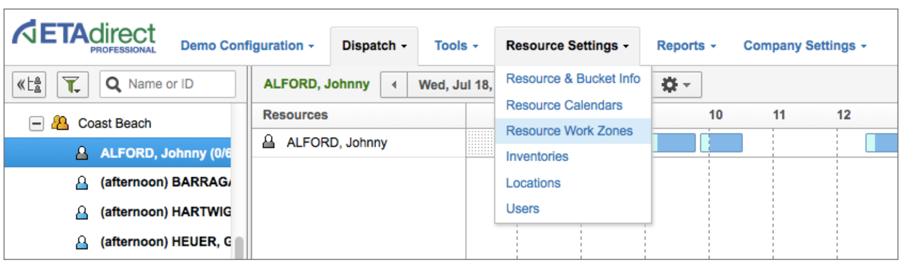
Work zones define the regional areas in which technicians are permitted to work.

Follow these steps to assign a work zone to a resource:

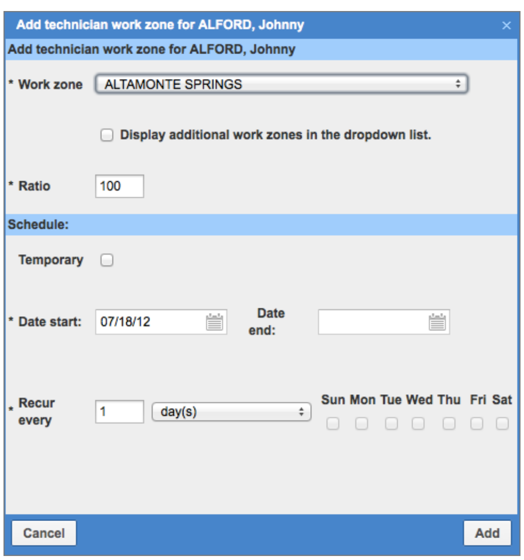
1. Select the resource from the Resource Tree.



2. Click **Resource Settings** and then select **Resource Work Zones** from the drop-down menu.



3. The **Resource Work Zones** screen displays for the selected resource.
4. Click **Add new**. The **Add Technician Work Zone** window appears:



5. Click **Add**. The work zone is added to the resource.

Work Zone: Select the work zone from the drop down list.

Display: additional zones in the drop-down list Check the box to view all the active work zones. For the group or bucket that this resource is in.

Ratio: Type a value between 1 and 100. A higher number increases the likelihood that this resource will be assigned activities in this work zone. If this is a work zone the resource works in daily, or if it is a preferred zone for the resource, enter a higher number. If this resource only works in this work zone occasionally or only by exception, enter a lower number.

Note: You can assign multiple work zones with different ratios to one resource.

Schedule Section:

Temporary: Select this checkbox to create a temporary work zone for a specified period of time.

Date Start: Enter the date that this work zone assignment starts.

Date End Optional: If this is a temporary assignment, enter the date that this work zone assignment ends.

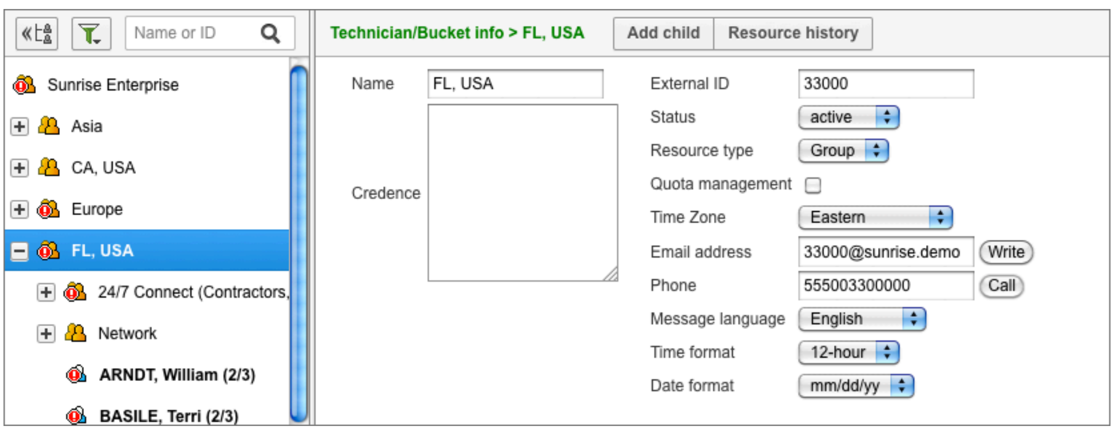
Recur every: Set the schedule for the work zone if the resource is alternating between work zone assignments. Resources can cover different work zones on different days of the week. Use this feature to change a resource's work area on certain days of the week.

Adding a Group to the Resource Tree

Groups are used to sort and organize the other items in the Resource Tree. They are typically used to group resources by location. Groups cannot be route owners and activities cannot be assigned to them.

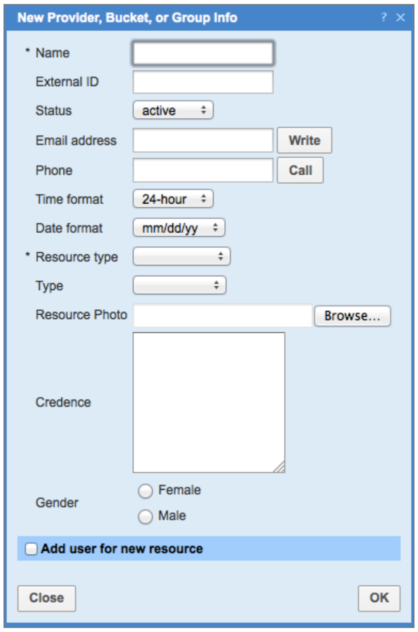
Follow these steps to add a new group, perform the following steps:

1. In the Resource Tree, select the Group or Bucket that you want to add the new group to
2. Click **Resource Settings** and then select **Resource & Bucket Info** from the drop-down menu.
3. Click **Add child**.



The **New Provider, Bucket or Group Info** screen displays.

4. Select **Group** from the Resource Type drop-down menu.



The available fields on the screen change to the fields that are relevant to Groups.

5. Use the list below to complete the fields:
   - **Status:** Select Active or Inactive from the drop-down list. Active resources can use the ETAdirect system. Inactive resources cannot use the system.
   - **Time format:** Select the time format that the resource will use and see in the interface. Options are 12-hour format and 24-hour format.
   - **Date format:** Select the date format that the resource will see and use in the interface. Options are day-month-year and month-day-year.
   - **Resource Type:** Select the type of resource. Resource types are custom for each company. Typical resource types are Technician and Truck.
   - **Credence:** Type any additional information about the resource that you want to provide for the customer.
   - **Add user for new technician:** Click this checkbox to add additional fields required to create the user represents this resource.
     - Before a resource can use the ETAdirect system, he or she must also have a user account. You can create it here, or you can create it in a separate step.

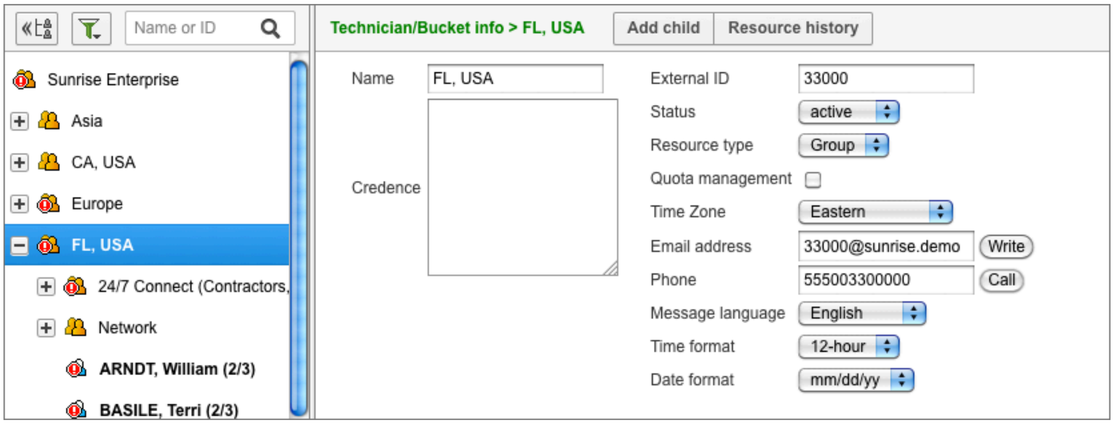
     See **Adding a User** for descriptions of each of these fields and for detailed instructions about adding a user in a separate step.
6. Click **OK**. The new Group appears in the Resource Tree.

Adding a Bucket to the Resource Tree

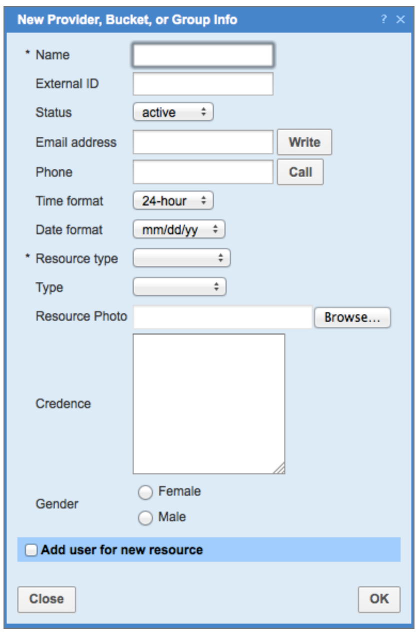
You can use Buckets like Groups to sort and organize items, but you can also use them to hold activities that you want to route to the resources in the Bucket.

Follow these steps to add a new **Bucket**, perform the following steps:

1. In the Resource Tree, select the Group or Bucket to which the new Bucket will be added.
2. Click **Resource Settings** and then select **Resource & Bucket Info** from the drop-down menu.
3. Click **Add child**.
4. The **New Resource, Bucket or Group Info** screen displays.



5. Select **Bucket** from the Resource Type drop-down menu.



The available fields on the screen change to the fields that are relevant to Buckets.

6. Use the following list to complete the fields:
   - **Status:** Choose the status for the Bucket. Activate Buckets can be seen and used. Inactive Buckets cannot be used.
   - **Time format:** Select the time format to use with this Bucket. The options are 12-hour format and 24-hour format.
   - **Date format:** Select the date format that you want to use with this group. The options are month-day-year and day-month-year.
   - **Resource Type:** Select **Bucket**.
   - **Credence:** Type any additional information about the Bucket.
   - **Add user for new technician:** Do not check this option. It does not apply to Buckets.
7. Click **OK**. The new Bucket appears in the Resource Tree.

   Note: If you want ETAdirect to use this bucket for Capacity and Quota Management, you must configure the option in the **Resource & Bucket Info** screen.

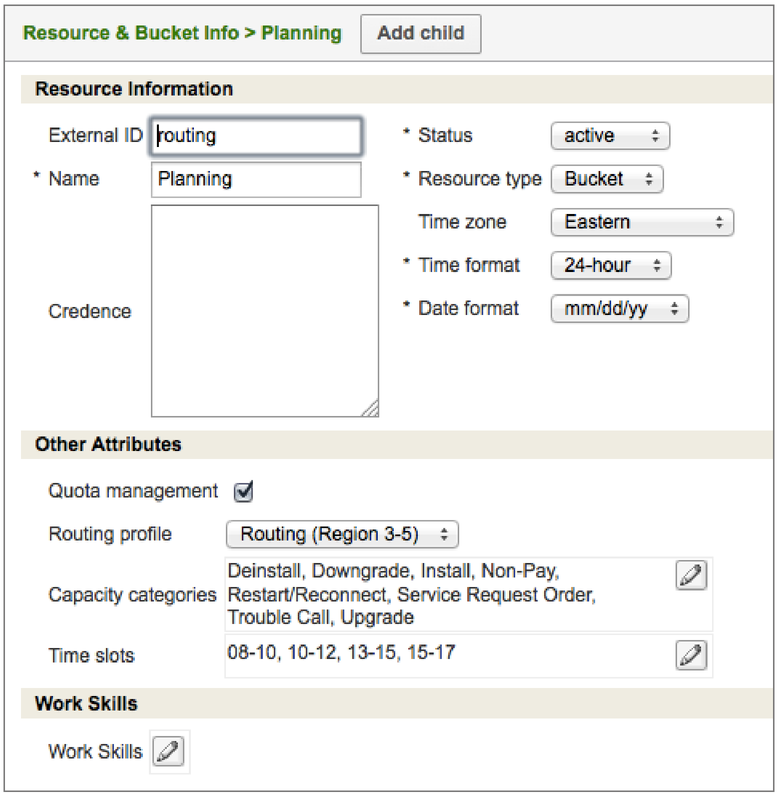
See **Using a Bucket for Capacity and Quota Management** for details.

Using a Bucket for Capacity and Quota Management

If you want to use this bucket for quota calculation, you must configure the option in the **Resource & Bucket Info** screen. Typically, the buckets that you send appointments to are also used for Capacity and Quota Management.

Follow these steps to configure ETAdirect to use this bucket for capacity management and quota management:

1. Click the name of the bucket in the Resource Tree that you want use for Capacity and Quota Management.
2. The **Resource & Bucket Info** screen displays. Check the box next to Quota Management under **Other Attributes**. The **Capacity Categories** and the **Time Slots** fields display.



3. Select the **Capacity Categories** that you want to use for this bucket.
4. Click the **pencil icon** next to the Capacity Categories field. Check the categories that you want to use for this bucket and then click Save
5. Select the **Time Slots** that you want to use for this bucket.
6. Click the **pencil icon** next to the Time Slots field. Check the time slots that you want to use for this bucket and then click **Save**.
7. Click **OK**.

Assigning a Resource to a Team

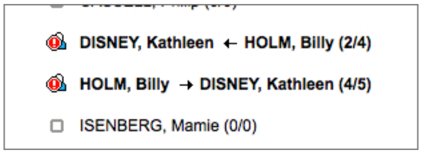
The Teamwork feature allows two or more resources to work together on an activity, either for a single day or on an on-going basis.

For example, you might use **Teamwork** to assign one resource to work with another assign a truck to a technician, or to assign a new employee to a more experienced employee for training.

The teamwork feature assigns each resource a role:

- **Team Leader** – Resource who is being assisted.
- **Assistant** – Resource who is assisting the Team Leader.

When resources are assigned teamwork, they are displayed next to each other in the Resource Tree. The arrow between the resources shows which resource is assisting and which resource is leading. The arrow points toward the Team Leader. In the picture below, Billy Holm is assisting Kathleen Disney:

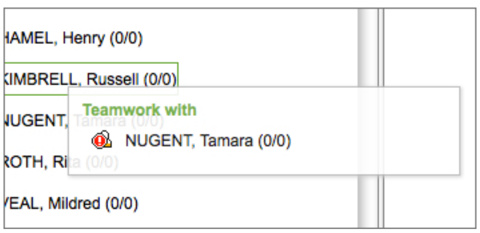


Also, in the Assistant's Work Order queue, time is reserved and marked as Assisting.

Follow these steps to assign teamwork:

1. In the Resource Tree, select the Resource that you want to be the Assistant.
2. Drag the Assistant to the Resource that you want to be the Team Leader.

   Note: When you drag a resource over another resource, Hints might be displayed to indicate whether or not the selected resource can participate in Teamwork. When you drop the resource onto the other resource, a green box displays around the Team Leader. The Teamwork assignment box displays.



3. Complete the required fields and then click **OK**. Teamwork appears in the Assistant's work queue and the Resource Tree indicates that the Team Leader is being assisted.

Updating Team Activities

Teamwork activities are managed the same way as regular activities. The Team Leader starts and completes the teamwork activity on the mobile device. If necessary, you can perform these actions on behalf of the resource.

Managing Resource Calendars

Calendars identify the hours that the resource works. ETAdirect uses this information to route activities and calculate arrival times. If a resource's schedule changes, you must update their working hours in the Calendar.

ETAdirect provides two ways to interact with a resource's calendar:

- **Daily View:** Use the **Daily View** to see the calendar of a resource, group or bucket for a whole week. This view is also useful for making small changes to individual calendars in the current week.
- **Resource Calendars View:** Use the **Resource Calendars** view to see the details about an individual resource's schedule. This view is also useful for making changes that involve more than one day or more than one resource.

Viewing a Resource's Calendar in Daily View

Follow these steps to view a calendar in Daily View:

1. In the Resource Tree, select the Resource, Group or Bucket that you want to see in the calendar.
2. Click **Daily** in the Menu bar. The calendar displays.
3. Click the arrow buttons on either side of the date to change the date.
4. Click the View button to filter the information displayed.

Modifying a Calendar in Daily View

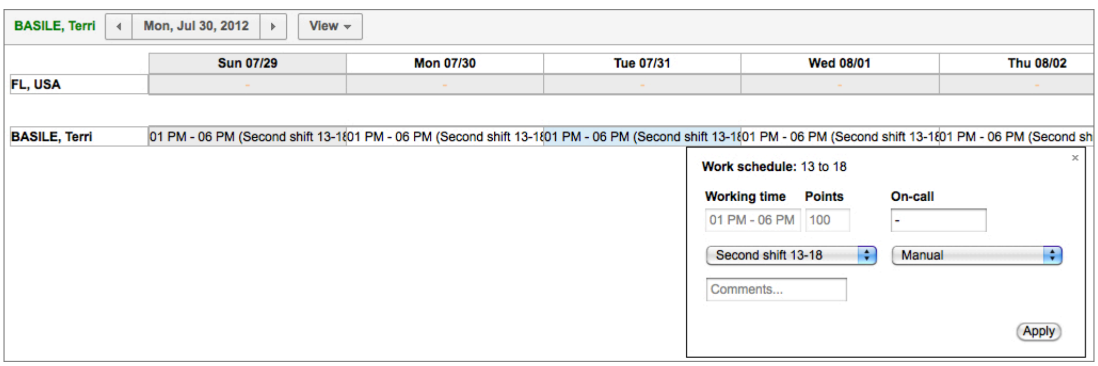
Use Daily View to make small changes to an individual calendar. You can perform he following tasks in this view:

- Adding a Shift to a Calendar
- Adding Working Time to a Calendar
- Adding a Working Time Override to a Calendar

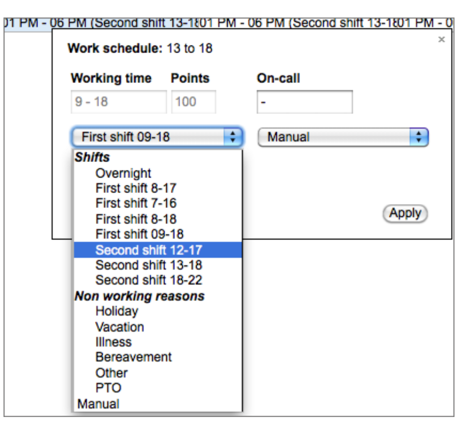
Follow these steps to modify a calendar in Daily View:

1. Click the **Daily** tab.
2. Select the bucket, group or resource you want to change from the Resource Tree. The calendar screen displays.
3. Click the day you want to modify. A time entry dialog box displays.

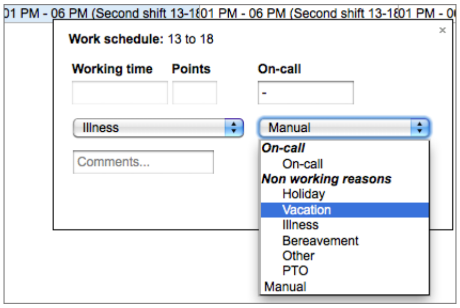
Note: You can make changes only to days that occur in the future. Past days cannot be changed.



4. Click the arrow next to the drop-down box of choices. If shift is chosen, then time and points edit boxes display the values of this shift and are disabled, since the value is determined by shift.
5. If the change includes non-working time, then select one of the reasons from the list:



6. Select the time range. You can select a particular shift from the drop-down list on the left, or you can choose **Manual** and enter the actual time and points (if used).



7. Enter the new schedule for the resource by typing a new time range. For example: 0830 – 1630.
8. Enter any comments, if needed.
9. When you are finished, click **Apply**.

Note: If you want this resource to inherit the calendar from the parent group or bucket, choose **Default**. Setting to Default clears the calendar and applies the parent calendar.

Viewing a Resource's Calendar in Resource Calendars View

Follow these steps to view a calendar in Resource Calendars View:

1. Select the Resource that you want to see in the calendar from Resource Tree.
2. Click **Resource Settings** and then select **Resource Calendars** from the drop-down list. The calendar displays.

Modifying a Calendar in Resource Calendars View

Use the Resource Calendars View to make big changes to calendars for Groups, Buckets or Resources.

You can perform the following tasks in this view:

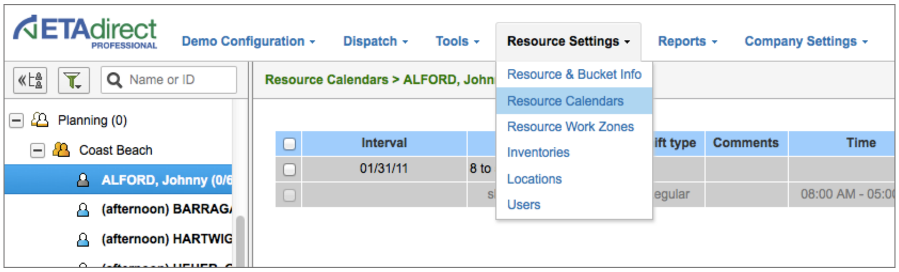
- Adding a Work Schedule to a Calendar
- Adding a Shift to a Calendar
- Adding a Shift Override to a Calendar
- Adding Working Time to a Calendar
- Adding a Working Time Override to a Calendar
- Adding Non-Working Time to a Calendar
- Deleting Items from a Calendar

Adding a Work Schedule to a Calendar

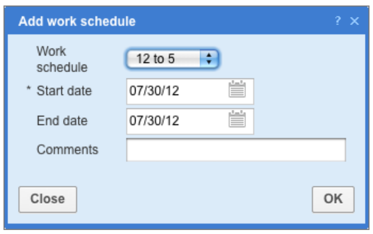
Work schedules are templates that combine of shifts and non-working times. You can assign a work schedule to a resource, bucket or group.

Follow these steps to add a work schedule to a resource's calendar:

1. Select the Resouce from the Resource Tree.
2. Click **Resource Settings** and select **Resource Calendars** from the drop-down menu.



3. The **Resource Calendars** screen displays.
4. Click the Actions button and select **Add work schedule** from the drop-down menu. The **Add Work Schedule** window is displays.



5. Select the work schedule from the drop-down list.
6. Enter a **Start date** and an **End date**, if applicable.
7. Click **OK**.

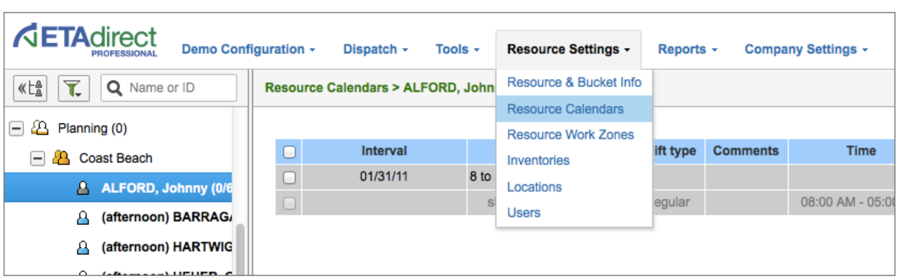
Adding a Shift to a Calendar

Shifts within ETAdirect are standard patterns of working time as defined by a company. They determine when a resource is available for work.

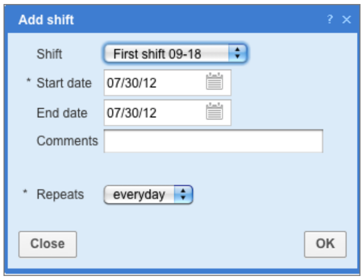
Important: Shifts applied at the resource level override shifts applied at a higher level in the Resource Tree.

Follow these steps to add a shift to a resource's calendar:

1. Select the resource from the Resource Tree
2. Click **Resource Settings** and select **Resource Calendars** from the drop-down menu.



3. Click the **Actions** button and select **Add shift** from the drop-down menu.
4. The **Add Shift** window displays.

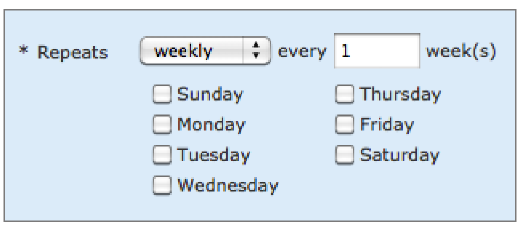


5. Fill in the fields as described.
   - **Shift:** Select a pre-configured shift from the drop-down list.
   - **Start date:** Select the Start date of the shift.
   - **End date:** Select the End date of the shift, if applicable.
   - **Comments:** Enter Comments, if any.
   - **Repeats:** Select an option from the drop-down list:

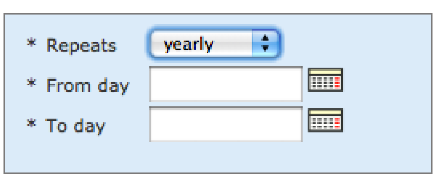
     Daily: Apply to schedules such as every other day or every 3rd day. This option requires some value in the field labeled **every _____ day(s).**

     Everyday: Applies to every day schdules that repeat without exception and without any modification options.

     Weekly: Apply calendars that have a regular weekly pattern. Select the days that apply to this particular shift using the check boxes for the individual days. Indicate the frequency of this pattern weekly by adding a value to the **every ____ weeks(s)** field.



     Yearly: Occurs every year until the date entered in the **to day** field.



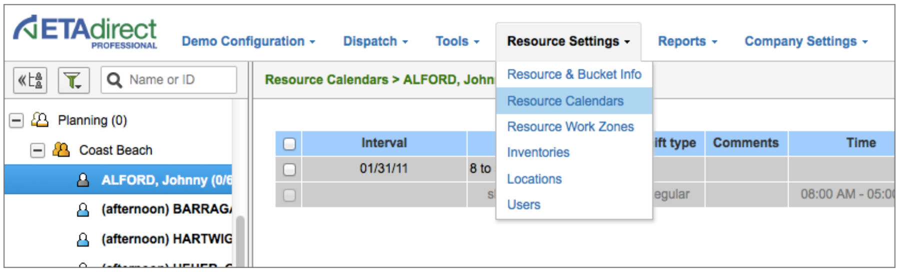
6. Click **OK**.

Adding a Shift Override to a Calendar

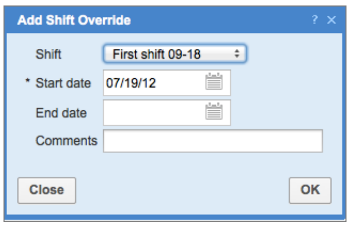
You can add a shift to a resource's calendar that will override any other shifts that are assigned. A shift override is typically used to make a temporary change to a calendar. Shift overrides do not change previously created shifts. Overrides can take effect for specific periods of time and always take precedence over other shifts that occur during the same time frame.

Follow these steps to add a shift override to a resource's calendar:

1. Select the resource from the Resource Tree. Click **Resource Settings** and select **Resource Calendars** from the drop-down menu.



2. Click the **Actions** button  and select **Add Shift Override** from the drop-down menu.



The **Add Shift Override** window displays.

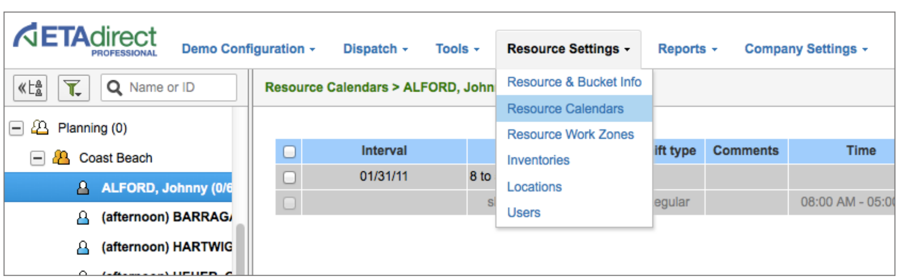
3. Select the Shift from the drop-down list.
4. Enter a **Start date** and an **End date**, if applicable.
5. Click **OK**.

Adding Working Time to a Calendar

Working time differs from shifts in that it represents start and stop times may that differ from the pre-defined shifts. You might want to use working time when a resource works a different number of hours than he or she normally does or when the resource works at a different time of day than the other resources.

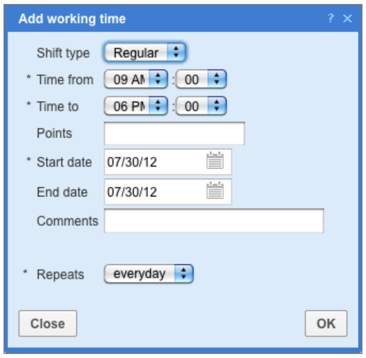
Follow these steps to add Working Time to a resource's calendar, perform the following steps:

1. Select the resource n the Resource Tree.
2. Click the **Actions** button  and select **Resource Calendars** from the menu list.



The **Resource Calendars** screen displays.

3. Click the **Actions** button  and select **Add Working Time** from the drop-down menu. The **Add Working Time** window displays.



Shift Type Select “regular” or “on call” from the drop-down list.

Time From: Enter the time when the resource begins work.

Time Follow these steps to: Enter the time when the resource’s day ends.

Points: If using points to cap activity assignments, you can enter them here. These points work the same way as points associated with shifts.

Start date: Select the date when this working time should go into effect

End date: Select the date (if applicable) when this working time should no longer apply to the resource.

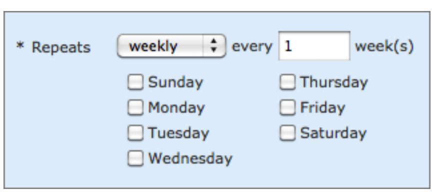
Comments: Enter any comments about this working time.

Repeats: Select the repeat options from the drop-down. Options include:

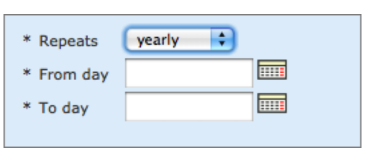
Daily: Applies to schedules such as every other day or every 3rd day. This option requires some value in the field labeled **every _____ day(s).**

Everyday:Calendar applies to every day without exception and without any modification options.

Weekly: Applies to calendars that have a regular weekly pattern. Select the days in which this particular working time applies using the check boxes for the individual days. Indicate the frequency of this weekly pattern by adding a value to the **every ____ weeks(s)** field. Use the check boxes to select the days to which this Working Time displays.



Yearly Select a date range that will recur each year.



Click **OK**.

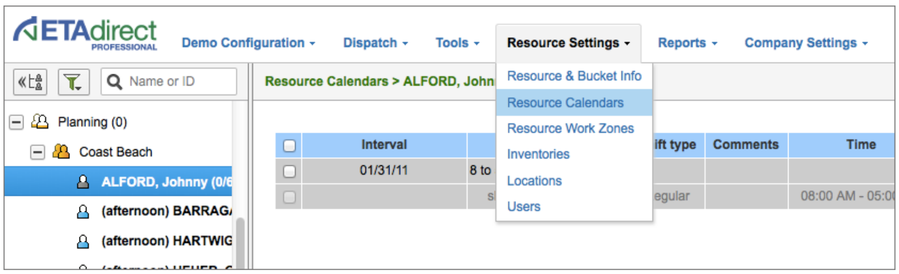
Adding a Working Time Override to a Calendar

This is an option in the Actions pane that allows you to add working time to a resource’s calendar that would intentionally override any other working times that they are assigned. Overrides can take effect for specific periods of time, always take precedence, and are typically considered temporary changes to a calendar – without the need to modify previously created working times.

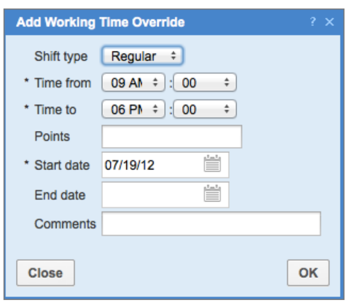
Overrides are typically temporary changes to a calendar that take effect for a specific period after which the resource returns to their regular schedule. Overrides can take effect for specific periods of time and always take precedence over other shifts that occur during the same time frame.

Follow these steps to add a working time override to a resource's calendar.

1. Select the resource from the Resouce Tree.
2. Click **Resource Settings** and select **Resource Calendars** from the drop-down menu.
3. The Resource Calendars screen displays.



4. Click the **Actions** button and select **Add Working Time Override** from the drop-down menu.



The **Add Working Time Override** window displays.

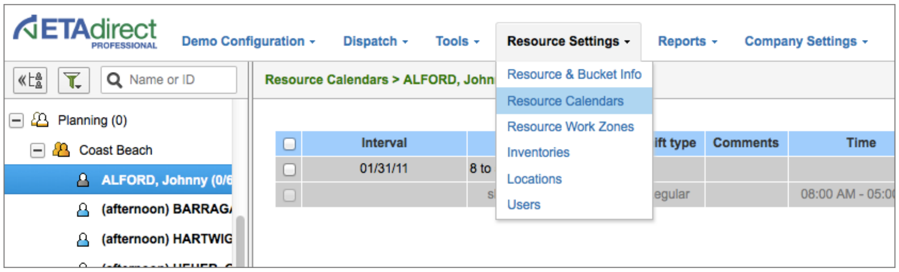
5. Fill in the fields as described below:
   - **Shift Type:** Select Regular or On Call from the drop-down list.
   - **Time From:** The time when the resource begins work.
   - **Tim:** The time when the resource's day ends.
   - **Points:** If using points to cap activity assignments, you can enter them here. These points work the same way points associated with a shift.
   - **Start date:** Select the date when this Working Time should go into effect for the resource.
   - **End date:** Select the date (if applicable) when this working time should end for the resource.
   - **Comments:** Enter any comments about this Working Time.
6. Click **OK.**

Adding Non-Working Time to a Calendar

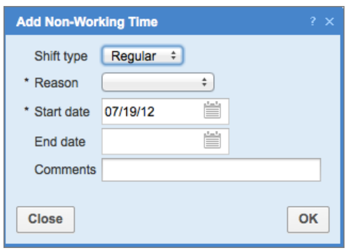
Non-working time is a defined absence that can applied to a single resource, group or a bucket.

Follow these steps to add non-working time to a work schedule: :

1. Select the resource, group or bucket in the Resource Tree.



2. Open **Resource Settings** and then select **Resource Calendars** from the drop-down. The **Resource Calendars** screen displays.
3. Click the **Actions** button and select **Add Non-Working Time** from the drop-down menu. The **Add Non-Working Time** window displays.



4. Complete the fields as described below:
   - **Shift Type:** Select Regular or On Call from the drop-down list.
   - **Reason Select:** one of the non-working reasons from the drop-down list.
   - **Start date:** Select the date when this Working Time should go into effect for the resource.
   - **End date:** Select the date, if any when this working time should end for the resource.
   - **Comments:** Enter any comments about this working time.
5. Click **OK**.

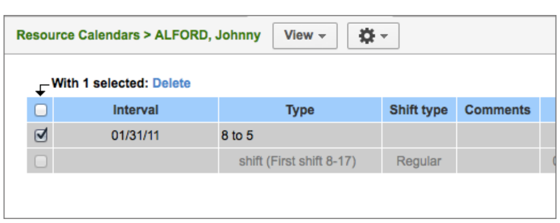
Deleting Items from a Calendar

When you want to remove a work schedule, shift, working time, non-working time or override from a resource's calendar, you can delete it.

Note: Once you delete an item from a resource calendar, the resource re-acquires any like items that are set at a higher level. For example, if you delete a work schedule from a calendar, the resource reacquires the work schedule of it's bucket or group.

Follow these steps to delete an item from a resource calendar:

1. Select the resource from the Resource Tree.
2. Click **Resource Settings** and then select **Resource Calendars** from the drop-down menu. The **Resource Calendars** screen displays.
3. Click the check box next to the item that you want to delete and then click Delete.



4. Click **OK**.

Chapter

5

Managing Activities

Topics:

- **Searching for an Activity**
- **Moving an Activity**
- **Adding a Single Activity**
- **Adding a Mass Activity**
- **Adding a Repeating Activity**
- **Adding Prework**
- **Adding an Activity to a Shift**
- **Linking Activities**
- **Creating Activity Link Types**
- **Linking Activities Automatically**
- **Linking Activities Manually**
- **Cancelling an Activity**
- **Changing Activity Status on Behalf of a Resource**

Activities are the tasks that resources complete over the course of their shifts. You can move activities, add activities, and change activity details.

Additionally, if a resource cannot perform his or her work with activities in ETAdirect, you can perform that work on their behalf.

Searching for an Activity

The activity search field is located in the upper right corner. It is represented by a magnifying glass.

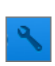
Follow these steps to search for an activity:

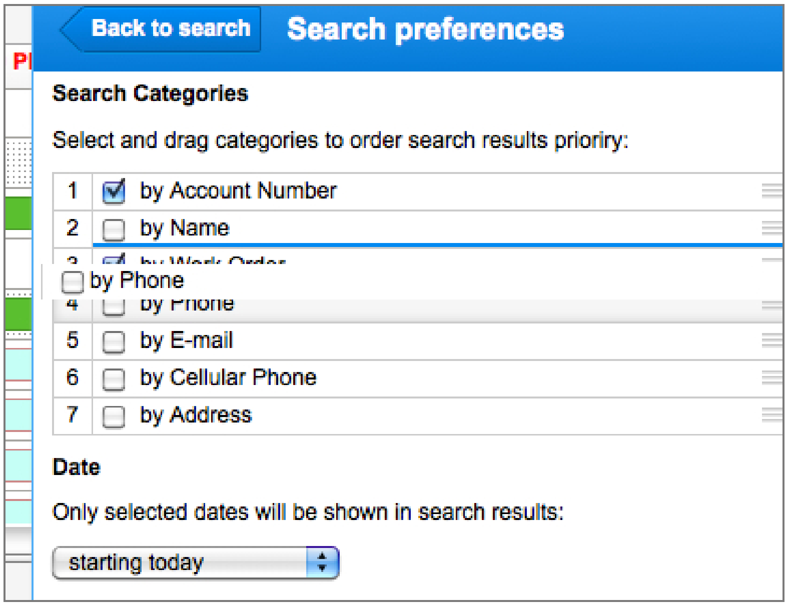
1. Click the magnifying glass to open the search box.
2. Enter the word or numerical value for which you are searching.

3. You can enter a partial word or value, but you must enter at least three characters. The results display below the search box.
4. Click the result to view the Activity Details.

Narrowing the Activity Search Results

You can use Search Preferences to narrow and order the search results. Search Preferences are pre-configured by your company.

1. Click the wrench icon  to view the search preference.
2. Click the check boxes next to the options that you wish to search by from the Search Preferences menu.
3. Drag and drop the categories in the list to change the priority of the preferences in the search results.



Select the date range for the search results from the drop-down menu

4. Select **Back to search**  and enter the search value.

Moving an Activity

When you identify an activity or group of activities that are in jeopardy, you can move the activities to another resource or to a bucket for re-assignment at a later time.

You can move activities from three different locations in the interface:

- **List View:** You can move one activity or you can move multiple activities at once. ETAdirect will propose resources that might be a good match for the activity. You can also choose where a new activity will fall in the new resources schedule.
- **Time View:** From this view, you can drag an activity from one resource to another. You can move only one activity at a time. ETAdirect chooses the best time in the resource's schedule and automatically moves the job to that time slot.
- **Map View:** From this view, you can drag an activity from one resource to another. You can move only one activity at a time. ETAdirect chooses the best time in the resource's schedule and automatically moves the job to that time slot.

Important: If you want to move more than one activity at the same time, you must use List view.

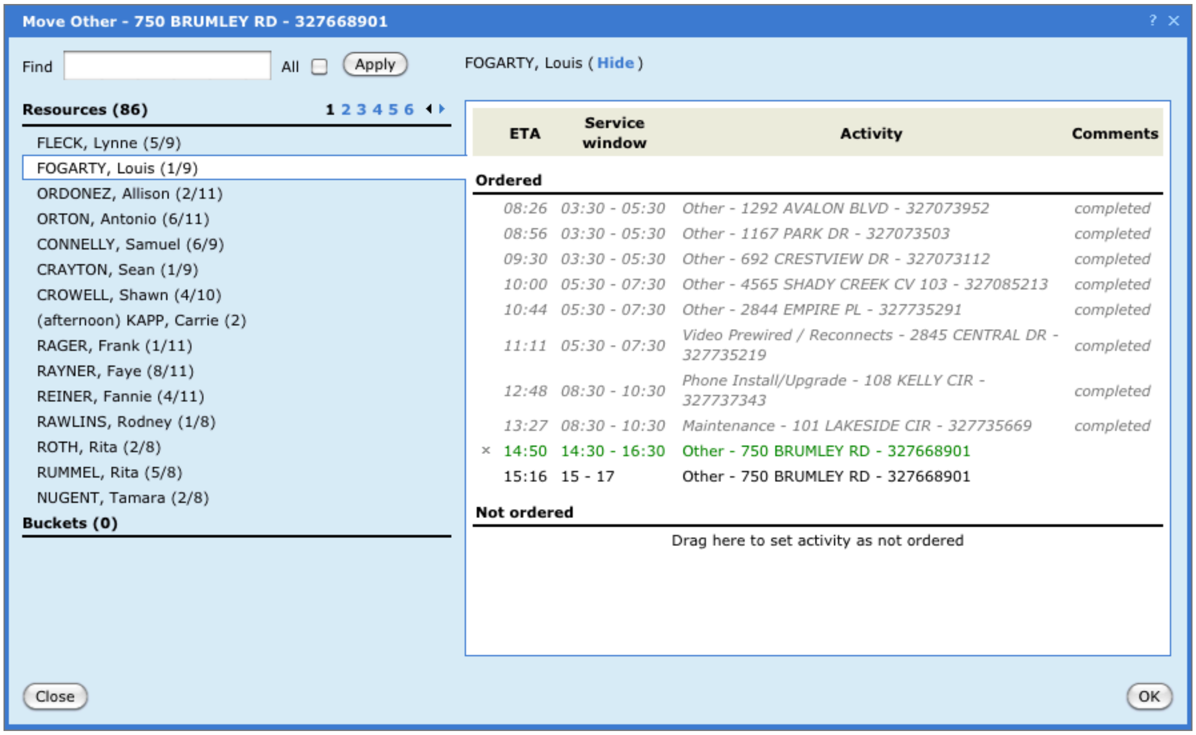
Moving an Activity in List View

When you are in List view, you can move an activity between resources using the Move link in the Hints box. Perform the following steps:

1. Click **List** on the Switch View tab.
2. Select the group or bucket that contains the activity. All of the resource's activities are displayed in the Work Area. Select the activity that you want to move. If you want to move multiple activities at once, select all of the activities now. The Hints box displays.
3. Click **Move**. The Move activity dialog box appears. The address of the activity and the work order number displays at the top of the screen. A list of available resources displays to the left.
4. Select the new owner from that list.
    - Choose a resource if you want to assign the activity now.

- Choose a bucket if you want the activity to be reassign during the next batch assignment.

5. On the right side of the screen, the moved activity displays in the new resource's route.



If the activity displays in **green**, the new resource is projected to arrive at the customer's location within the service window. If the activity displays in **red**, the new resource might miss the service window. If other activities are showing in **red**, the new activity jeopardizes the red activities. When activities turn red, another resource may be a better choice.

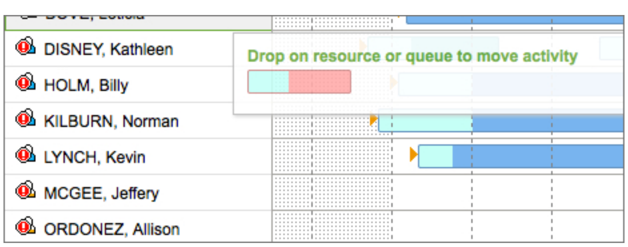
6. Click **OK** when you are satisfied with the move.

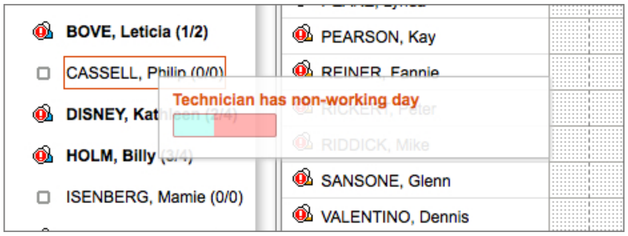
Moving an Activity in Time View

You can move activities between resources in Time View using drag and drop. Perform the following steps:

1. Select **Time** View.
2. Select the resource from the Resource Tree that you want to move the activity from. The resource's schedule displays in the Work Area.
3. Find the activity that you want to move, then drag it onto the new resource.

   When you drag the activity over the resource, a box colored appears around the resource's name. If the box is **red**, the resource is not available for work. If the box is **green**, the resource is available to take the job.





4. When you drag the activity onto a new resource, ETAdirect checks the move against the route to identify potential problems.

   One of two things happens:

   - If ETAdirect does not detect any potential problems with the move, the activity is added to the timeline. ETAdirect automatically chooses the time slot based on system information.
   - If ETAdirect detects a problem, a Move dialog box displays an alert. You can either move the activity anyway, or move it to another resource.

Moving an Activity in Map View

When you are in Map View, you can move an activity between resources using drag and drop.

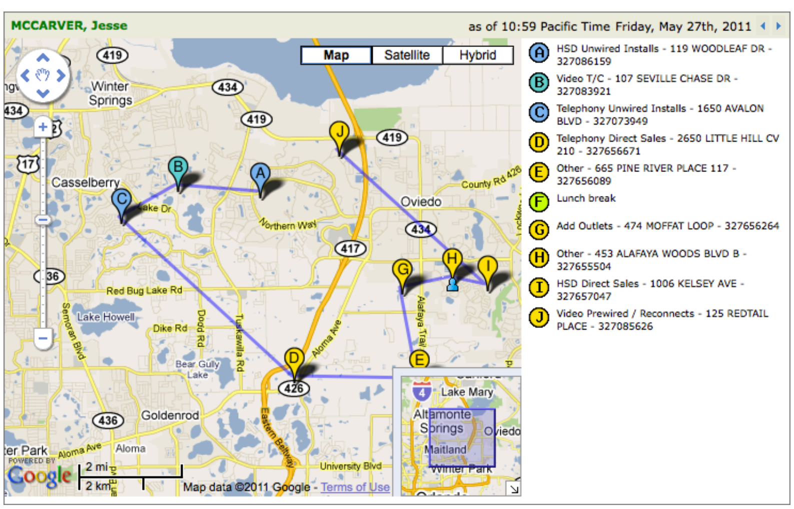
To move an activity in Map View:

1. Click the **Map** tab. Select the resource from the Resource Tree that you want to move the activity from. The resource's schedule displays in the Work Area.
2. On the route list on the right side of the screen, select the activity that you want to move.
3. Drag and the activity onto the new resource in the Resource Tree. When you drag the activity over the resource, a box colored appears around the resource's name. If the box is **red**, the resource is not available for work. If the box is **green**, the resource is available to take the job.

When you drop the activity onto a new resource, ETAdirect checks the move against the route to identify potential problems.

One of two things happens:

- If ETAdirect does not detect any potential problems with the move, the activity is added to the timeline. ETAdirect automatically chooses the time slot based on system information.
- If ETAdirect detects a problem, a **Move** dialog box displays the problem. You can either move the activity anyway, or move it to another resource.



Moving Activities Back to the Bucket

You might want to move activities from resources back to the bucket for a number of reasons:

- A resource called in sick and you have already assigned him or her a route.
- A resource is assigned activities that might place him or her in an overtime situation.
- An activity is in in jeopardy after routing.
- A resource requested a particular day off, but the calendar in ETAdirect does not reflect it as a non-working day and a route has already been assigned to him or her.

In List view, you can move activities using the **Move** link. In Time view and Map view, you can drag the activities onto the bucket.

Adding a Single Activity

Activities are usually added to routes through the routing process, but you can manually add an activity to a route, too. This feature is helpful when you need to set aside some time for a resource so that ETAdirect does not route any activities during that time.

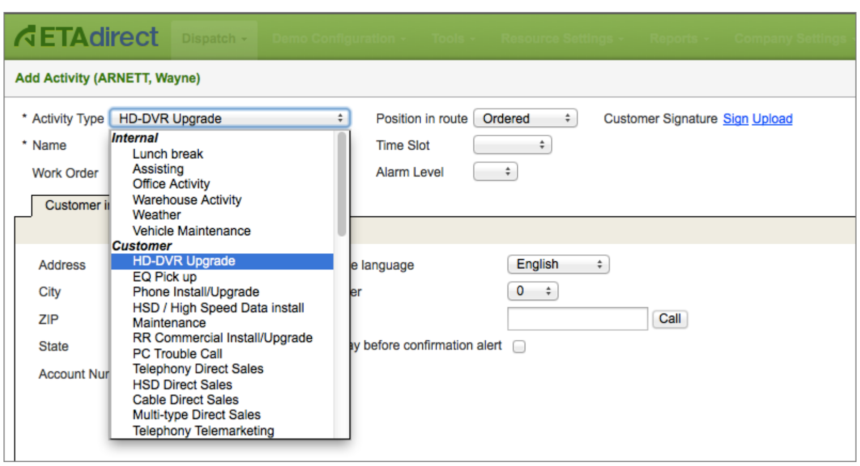
Follow these steps to add an activity to a resource's route:

- **Activity:** Type Select the activity type from the Activity Type drop-down list.
- **Name:** Type the customer's name. Used for customer-facing activities only.
- **Work Order:** Type the Work Order number associated with this activity.

Select the time that you want this activity to take place. The following options are available:

- **Not Ordered:** The activity displays as a "scheduled/not ordered" activity in the lower portion of the Time view interface.
- **Ordered:** The activity s displayed on the resource's route. If you specify a time slot the activity displays in that time sot. Otherwise, it displays as pending at the beginning of the route.
- **Duration:** Select the amount of time that the activity lasts.
- **Time Slot:** Select the period of time within which this activity can be started.
- **Activity Notes:**

1. Select the resource from the Resource Tree.
2. Click the **Actions** button and select **Add** Activity from the drop-down menu.
3. The **Add Activity** window displays. In the Activity Type field, select the activity type from the Activity Type drop-down list.



If this activity is an internal activity, the layout of the screen changes. Otherwise, the screen stays the same.

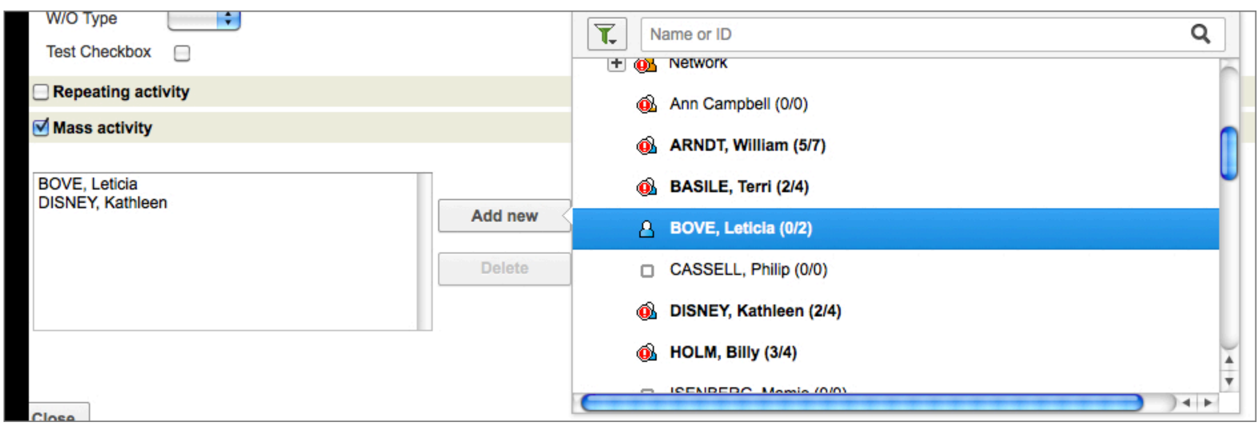
4. Use the list below to complete the applicable fields.
   - **Activity Type:** Select the activity type from the Activity Type drop-down list.
   - **Name:** Type the customer's name. Used for customer-facing activities only.
   - **Work Order:** Type the Work Order number associated with this activity.
   - **Position in Route:** Select the time that you want this activity to take place. The following options are available:
     - **Not Ordered:** The activity displays as a “scheduled/not ordered” activity in the lower portion of the Time view interface.
     - **Ordered:** The activity s displayed on the resource's route. If you specify a time slot the activity displays in that time sot. Otherwise, it displays as pending at the beginning of the route.
   - **Duration:** Select the amount of time that the activity lasts.
   - **Time Slot:** Select the period of time within which this activity can be started.
   - **Activity Notes:** Enter any notes associated with this activity.
5. Click **OK**.

Adding a Mass Activity

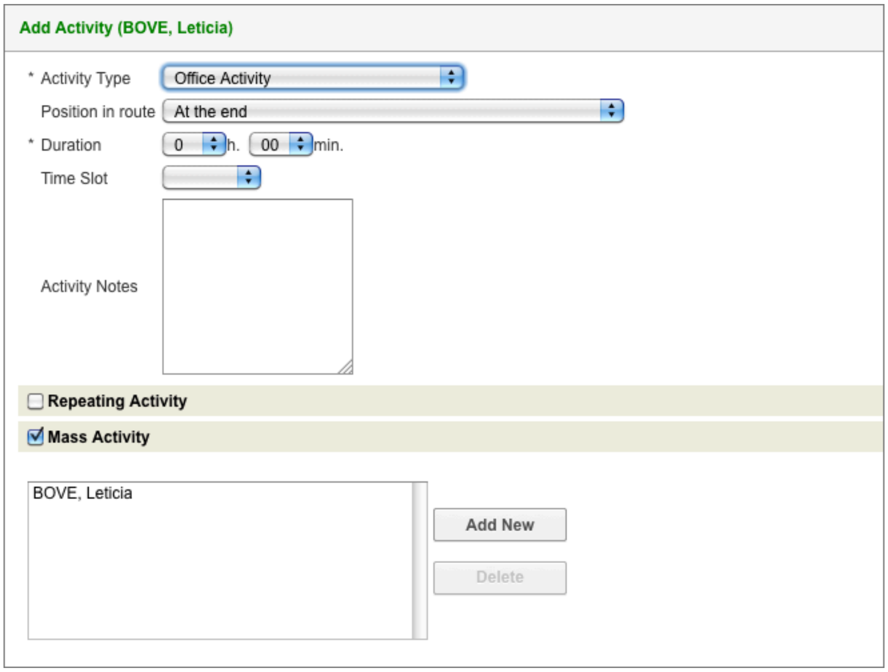
When you create an activity for one resource that you would like to use for other resources, you can create a Mass Activity. Examples of mass activities include scheduled team meetings and safety meetings.

Follow these steps to add a mass activity:

1. Add an activity to a resource as you normally would. See **Adding a Single Activity**.
2. On the Add Activity screen click the check box next to **Mass Activity.**



3. Click **Add new** to display the Resource Tree.



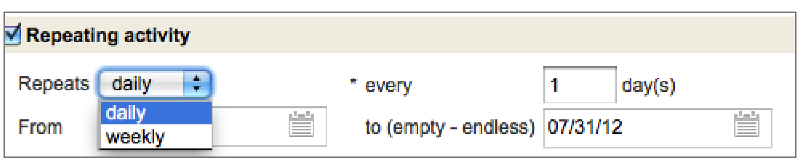
4. Click **OK**.

Adding a Repeating Activity

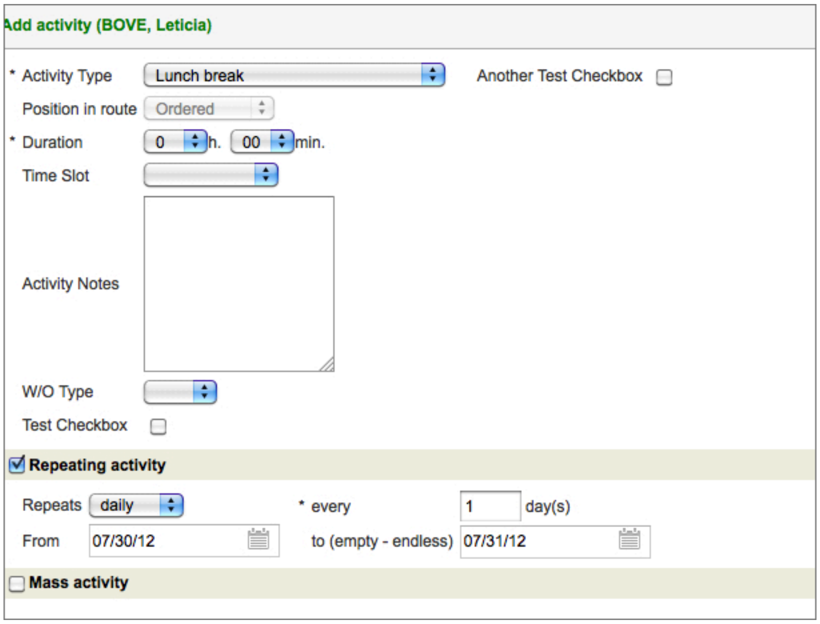
You can create activities that appear on a resource's route repeatedly for a specified period of time. Examples of repeating activities include training activities and lunch breaks.

Follow these steps to add repeating activities:

1. In the Resource Tree, select the resource that you want to assign the repeating activity to.
2. Click the **Actions** button and then select **Add Activity** from the drop-down menu.
3. On the next screen, select the Activity Type and the Duration.



4. Click the check box next to Repeating activity.



In the Repeating activity enter the following information:

- How frequently you want the activity to repeatIn the to (empty – endless) field, enter the date that you want the activity to stop repeating.

5. Click **OK**.

Adding Prework

You can add a prework activity for work that you want to complete in advance of another activity.

For example, if you work for a telephone company and a new customer requests a telephone connection, you might need to make connections at the depot before the connection at the house will work. You can add a prework activity for the task of making the connection at the depot. When it is time to make the connection at the house, you will be ready because the connection at the depot will already be in place.

Follow these steps to add prework to a route, perform the following steps:

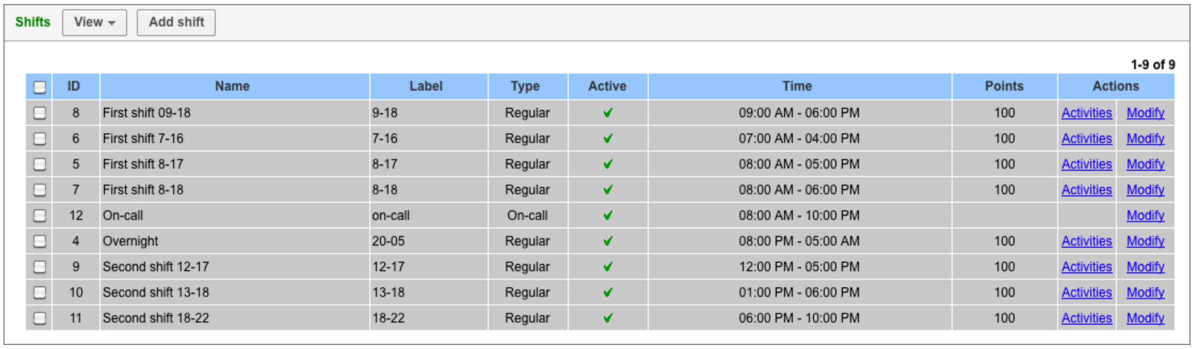
1. In the Resource Tree, click on the resource that you want to assign prework to. In the Work Area, click on the activity that requires prework. The Hints box is displayed.
2. Click **Prework** in the Hints box. The **Start Prework** dialog box displays.
3. Select the start time for the prework activity and then click **OK**. The prework activity is added to the route.

Adding an Activity to a Shift

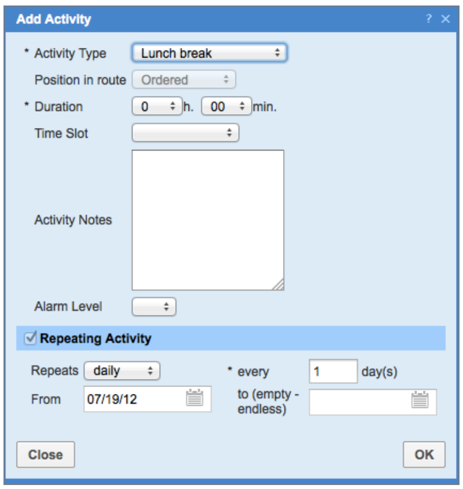
When you add an activity to a shift, the activity is added to the calendars of all of the resources that have that shift assigned to them.

Follow these steps to add an activity to a shift, perform the following steps:

1. Click **Company Settings** and choose **Shifts** from the drop-down menu. The **Shifts** list displays.
2. Click the **Activities** link in the row of the shift that you want to add the activity to.



3. Click the **Add Activity** button.



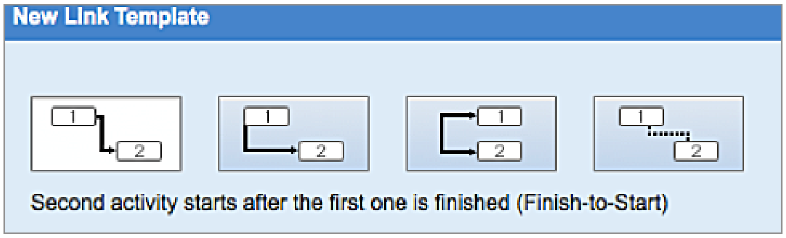
The Add Activity screen displays If this activity is an internal activity, the layout of the screen changes. If it is a customer-facing activity, the layout stays the same.

4. Complete the applicable fields as described in the following list:
   - **Activity Type:** Select the activity type from the Activity Type drop-down list.
   - **Name:** Type the customer's name. Used for customer-facing activities only.
   - **Work Order:** Type the Work Order number associated with this activity.
   - **Duration:** Select the amount of time that the activity lasts.
   - **Position in Route:** Select the time that you want this activity to take place. The following options are available:
     - **Not Ordered:** The activity displays as an activity that is "scheduled/not ordered" in the lower portion of the Time view interface.
     - **Ordered:** The activity s displayed on the resource's route. If you specify a time slot the activity displays in that time sot. Otherwise, it displays as pending at the beginning of the route.
   - **Time Slot:** Select the period of time within which this activity can be started.
   - **Activity Notes:** Enter any notes associated with this activity.
   - **Repeating Activity:** Check the checkbox and complete the fields if you want this activity to repeat.
5. Click **OK**.

Linking Activities

The concept of linking activities applies to a variety of situations in which jobs and resources must be linked and sequenced together over time. The following examples illustrate the diversity of linking activities:

- When a technician is assigned an activity that takes more than a day to complete, how do you make sure that activity continues to be assigned to him or her until it has been completed?
- A group of workers may be assigned to a series of activities related in such a way that the first one must be completed before the second can be started, and so on. What's the most efficient way to keep that big job moving efficiently?
- And what about a necessary break in a task that creates a corresponding gap in a technician's schedule? What can you do to make sure your resources remain productive while "waiting for the paint to dry"?



When activities are related serially over time or when routing relationships cause a break in the schedule, linking activities can be used to manage the link and restore efficiency.

The first step in linking activities is to create link types that correspond to the four linking relationships represented graphically on the New Link template. The next is to use those link types to link actual activities for Routing.

- **Creating Activity Link Types**
- **Linking Activities Manually**
- **Linking Activities Automatically**

Creating Activity Link Types

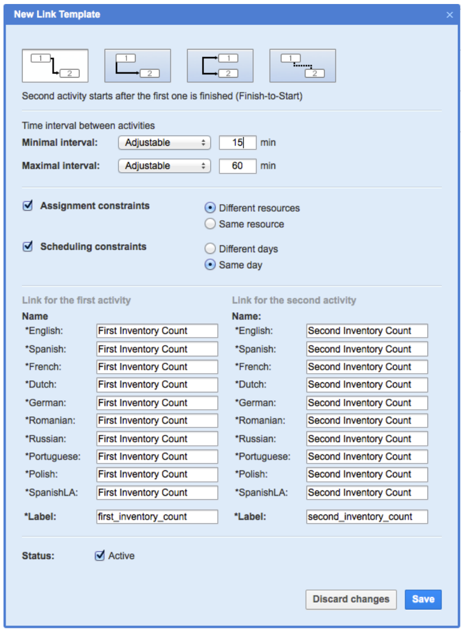
Before you can link activities, you must create Activity Link Types. Activity link types identify the way that two or more activities can be linked together and specify the constraints, if any, that should be placed on assigning and scheduling resources. Keep in mind that an Activity Link Type is generic. You should be able to reuse a Link Type to link various activities over time. So before you begin, in addition to the type of linkage (start-to-finish, etc.) think about more specific characteristics such as interval between activities and any rules you want to make about assigning and scheduling those activities.

Each activity link type that you create in ETAdirect actually consists of two linking options:

- **Regular link type:** This link type places the first activity in the schedule before the second activity.
- **Reverse link type:** This link type places the second activity in the schedule before the first activity.

The links that you create – both regular and reverse – will be available in the drop-down list that displays when you link activities.

The new Activity Link Type template pictured below features four different linkages:

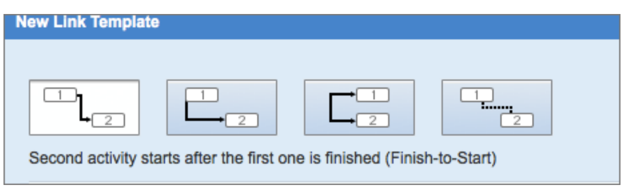


- **Start-to-Start:** Second activity starts after the first has been started.
- **Finish-to-Start:** Second activity starts after the first one has been finished.
- **Simultaneous:** Both activities start at the same time.
- **Related:** The relationship between these two activities is not sequential.

Because each of these link types generates two different linking options — regular and reverse — your linkage "library" could begin with at least 8 different link types, further differentiated by the amount of time between activities and any assignment and scheduling constraints — such as same technician over two days, different technicians on the same day that you want to place on them.

Follow these steps to create an activity link type:

1. Select **Activity link types** from the main menu. The list of activity link types displays.
2. Click the **Add activity link type** button. The **New Activity Link Type** screen displays as shown above..
3. Select the graphic at the top of the screen that represents the way that you want to link the two activites.



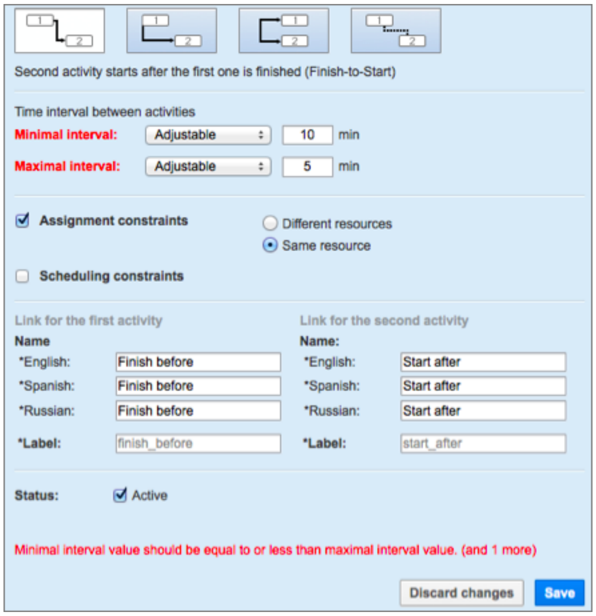
Note: Click one of the graphics to display a description of that linking relationship.

4. Enter the **Minimal Interval** of time between the two activities in minutes (min).
5. Enter the **Maximal Interval** of time between the two activities. For example, if the minimal interval is five minutes, the maximal might be ten or more minutes.
6. Enter any **Assignment Constraints**, that is, any limits or restrictions you want to place on assignments. There are two options: **Different resources** requires that the linked activities be assigned to two different resources. **Same resource** requires that both activities be assigned to the same resource.

7. Enter any **Scheduling Constraints**, that is, any limits or restrictions you want to place on the days for which the activities are scheduled. There are two options: **Different Days** requires the activities to be scheduled for two different days. **Same day** requires they be scheduled for the same day.
8. Enter a **Name** and a **Label** for this link type. The name is displayed in the web interface. The label is used by external systems when they submit information through the API.
9. Check the **Active** box in the **Status** field to make this link type available for use in ETAdirect.
10. Click **Save**.

Responding to Error Messages

Errors made when attempting to link activities will display one by one in the *Add/Edit* version of the Link template.



The error fields and the mesage display in red. The *and 1 more* notation indicates that there is one more error to be corrected. This notation will display automatically as soon as the first error is corrected and the correction is saved. Note that the number in parentheses will always reflect the total number of errors remaining, for example, *and 4 more, and 3 more*, etc. This number will decrease by 1 each time an error is corrected and saved.

Linking Activities Automatically

ETAdirect can link two activities together based on the information you send to the system through the Inbound **API**.

See the Inbound **API** in **Properties** Actions and Displays documentation for more information.

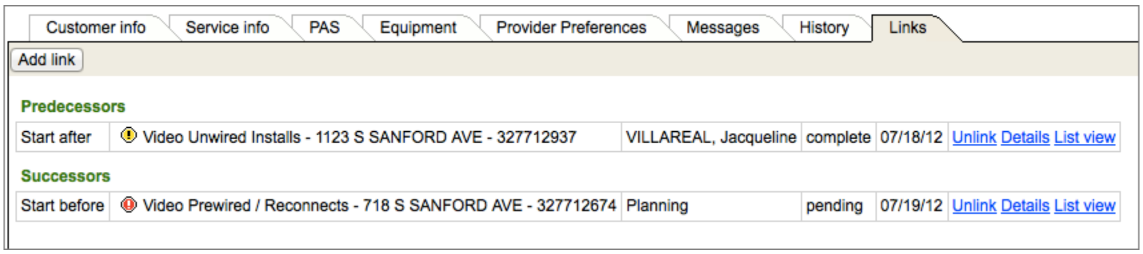
Linking Activities Manually

You link activities in order to make sure that they occur in a certain order when routing is run. A good example might be a trip to the depot to pick up a piece of non-standard inventory prior to an installation or a job that involves multiple workers performing related tasks in a certain sequence. An alternative to manually linking activities is automatic linking through the Inbound API. See the **Properties, Actions and Displays** manual to learn more about automatic linking.

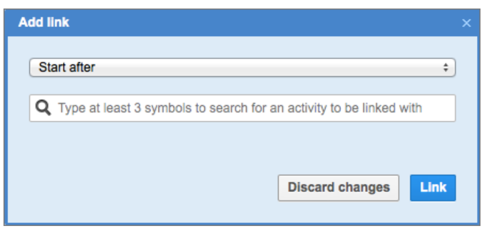
Note: Link Types must be created first, before you can link activities.

Follow theser steps to link activities manually:

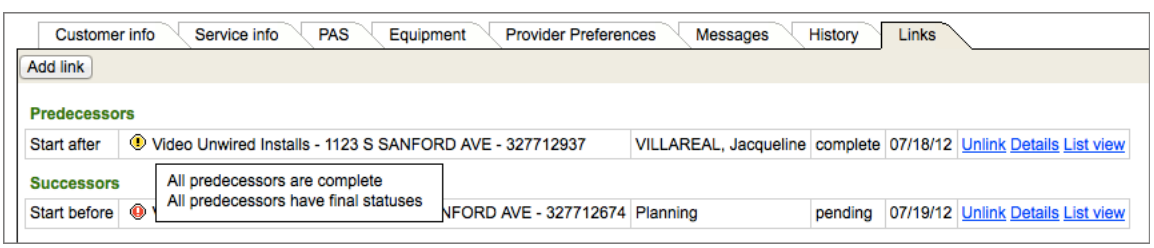
1. Open the Resource Tree.
2. Select the resource that has the first activity assigned to it. The resource's activities display.
3. Select the first activity that you want to link. The Hints box displays.
4. Click **Details** to view the activity details.
5. Click the **Links** tab at the bottom of the Activity details screen.
6. Click the **Add link** button.



The **Add link** window displays.



7. Select the type of link that you want to use from the drop-down list, i.e., Start after.
8. Use the next field to search for the activity that you want to link to the first.
9. Click **Link**. The new link displays.
10. Hover over the error icon to review the error messages and make changes as necessary.



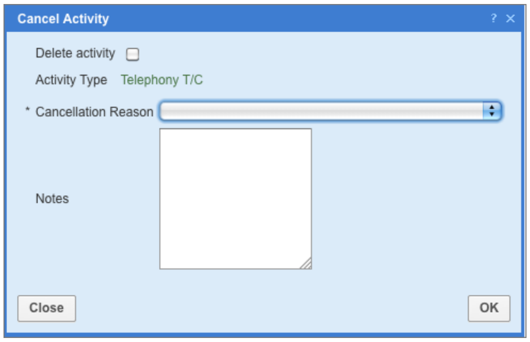
Warning: Error Messages may display. These messages may relate to the maximum and minimum intervals required by the Link Type you have chosen or to other scheduling and assignment constraints. See Responding to Error Messages under **Creating Activity Link Types** to learn more about Link Types and whether a new Link Type will have to be created.

Cancelling an Activity

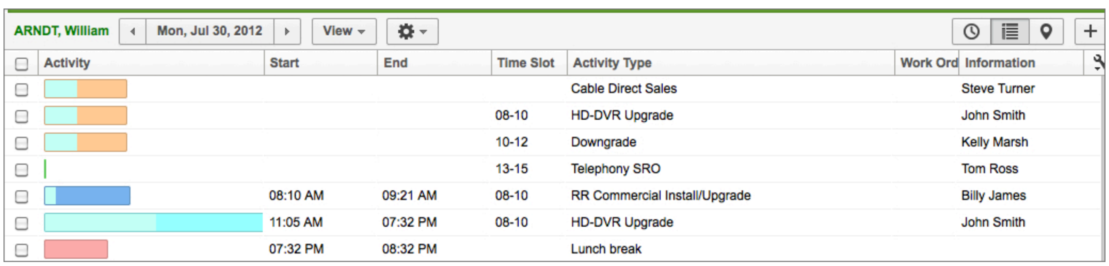
Only pending activities can be cancelled.

Follow these steps to cancel an activity:

1. In the Resource Tree, select the resource that you want to cancel the activity for.
2. In **List** view, select the activity or activities that you want to cancel.
3. Click **Cancel** in the blue box above the list.
4. In the Cancel Activity box, complete all required fields and select a **Cancellation Reason** from the drop-down list.



5. Click **OK**. The activity is removed from Time View, but still appears in list view with a small block of time.



Changing Activity Status on Behalf of a Resource

Resources typically update ETAdirect with the status of their activities and routes using their mobile devices.

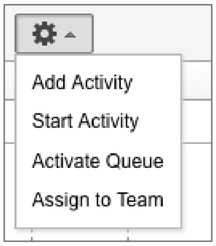
Activating a Queue or Route

For the ETAdirect system to monitor delivery in real time and respond to updates, a resource must activate his or her queue, or route. In the event that the resource forgets to activate his or her queue on time, you can activate the queue and re-set the actual time for the resource.

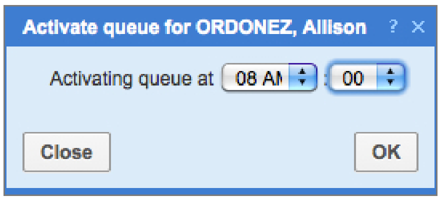
Note: Only dispatchers have permission to re-set the queue activation time. You can only reset the queue activation time if the queue is not activated.

Follow these steps to activate a queue:

1. Select the appropriate resource from the Resource Tree.
2. In the **Actions** menu, click **Activate queue**. The **Activate queue** dialog box appears.



3. Change the time to the actual time that the resource started the queue.



4. Click **OK**.

Starting an Activity

Typically, resources mark activities as started in ETAdirect when they begin to perform the activities. As a dispatcher, you can start an activity on behalf of a resource if necessary.

Important: You must start activities on time in the ETAdirect system. ETAdirect relies past activity data to project activity durations, travel times, and distances. If activities are not started on time, these projections are not accurate and routing is not optimized.

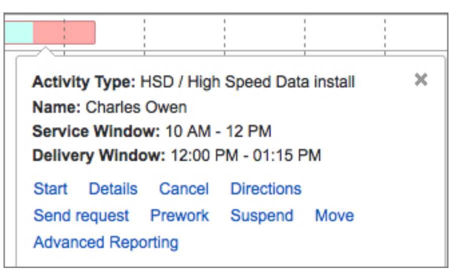
Prerequisites: You can start an activity only under the following circumstances:

- The route that the activity is assigned to is activated.
- All previous ordered activities must completed, suspended, marked not done, or cancelled.

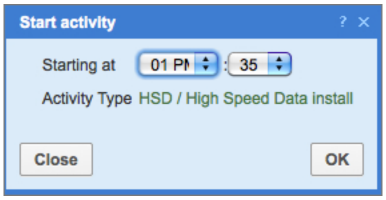
A dispatcher can adjust the start time of an activity, but cannot set a start time that would begin before a prior activity's end time. Resources cannot adjust start times.

Follow these steps to start an activity:

1. In the Resource tree, select the resource that you want to start the activity for.
2. In Time View, click on the activity to view the Hints box.
3. Click the **Start** link.



4. The **Start activity** dialog box appears: The start time defaults to the current time. If necessary, change the time.



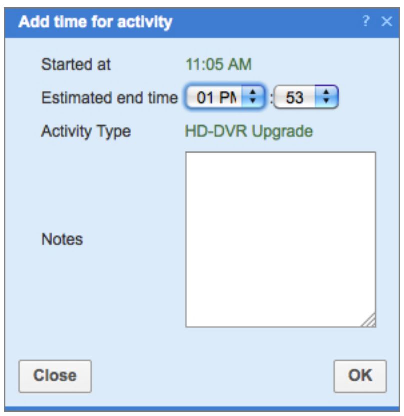
5. Click **OK**. Once the activity starts, it appears as dark green status in all views.

Adding Time to an Activity

If the resource cannot complete the activity by the estimated end time, then they can add time to the activity through their mobile interface. If necessary, you can add time to the activity on behalf of the resource.

Follow these steps to add time to an activity:

1. Select the resource in the Resource Tree.
2. From List or Time tab, locate the activity that you want to add time to.
3. Click the **Add time** link.



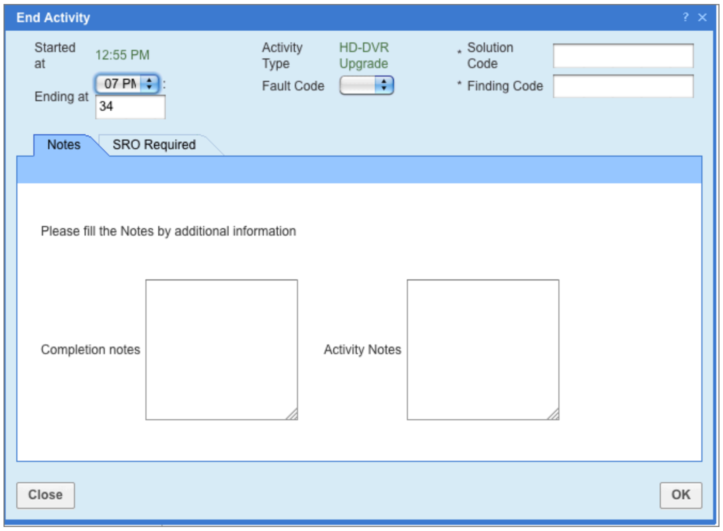
   In the Add time for activity box, enter the new Estimated end time.
4. Click **OK.** ETAdirect automatically recalculates the activities that follow according to these changes.

Completing an Activity

Typically, resources mark activities as complete in ETAdirect when they complete the actual activities. If necessary, you can mark the activity as complete on behalf of the resource.

Follow these steps to complete an activity:

1. In the Resource Tree, select the resource that you want to complete the activity for.
2. From the **Time** tab or **List** tab, select the **Actions** menu and then click **Complete**. The **End activity** dialog box appears.



3. At a minimum, complete the required fields (those with an asterisk *).
4. Click **OK**.

Suspending an Activity

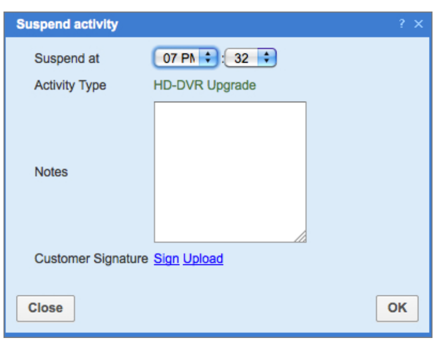
When resources need to return to activities at a later time and they do not want to cancel the activity, they can suspend the activity in ETAdirect. If necessary, you can suspend the activity on the resource's behalf.

Suspending an activity captures the time that a resource has already spent working on it and creates a new, duplicate activity that can be started at any time throughout the day.

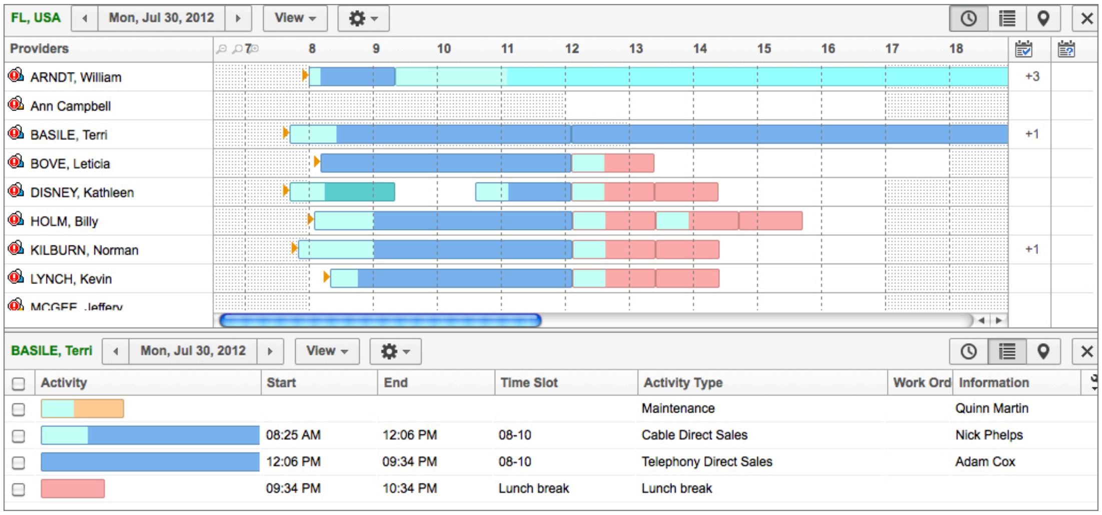
Note: Only started activities can be suspended.

Follow these steps to suspend an activity:

1. In the Resource Tree, select the resource that you want to suspend the activity for
2. On the **Time** tab, click on the activity that you want to suspend.
3. In the Hints box, click **Suspend**. The **Suspend activity** dialog box is displayed:
4. Select the time to start the suspension and then click **OK**.



5. In the Work Area, the current portion of the activity closes. It displays as a suspended activity (scheduled, but not ordered) in the lower half of the screen.



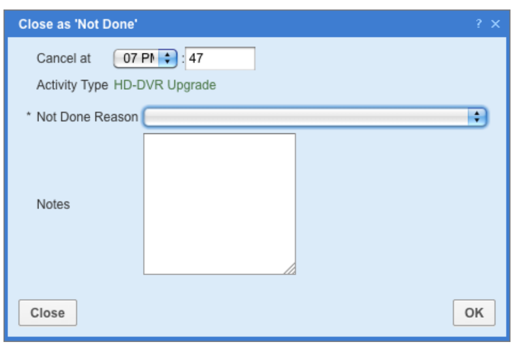
Assigning Not Done Status to an Activity

When resources discover that they cannot complete activities, they mark the activity as Not Done in ETAdirect. If necessary, you can change the activity to Not Done status on the resource's behalf.

Not Done closes the activity so that the resource can move on to the next customer.

Follow these steps to put an activity into Not Done status:

1. Select the resource from the Resource Tree.
2. From any of the views, click the Actions button and then select **Not Done** in the drop-down list. The **Close as Not Done** dialog box appears.



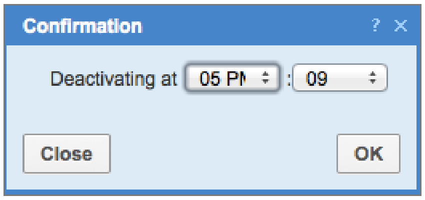
3. Select a Not Done Reason and then click **OK**.

Deactivating a Route or Queue

At the end of their shifts, resources must deactivate their routes. You can deactivate the route on behalf of the resource if necessary.

Follow these steps to deactivate a route:

1. In the Resource Tree, select the resource that you want to deactivate the route for. The resource's route displays.
2. In the Actions menu , click **Deactivate Queue**.
3. The **Deactivate queue** dialog box appears.



4. Enter the necessary information and then click **OK**.

Chapter

6

Managing Inventory

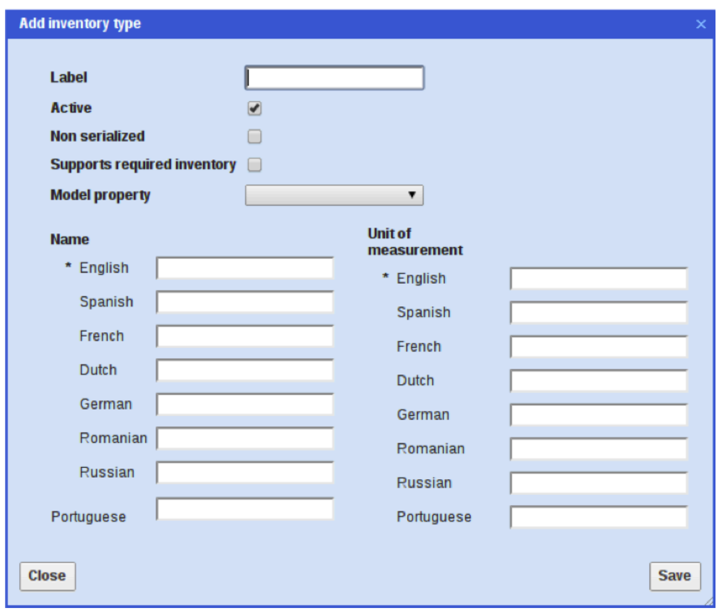
Topics:

The term inventory describes equipment that is used – or in the language of inventory – consumed by activities. Inventory items can be located at the customer's home or business or carried in a technician's truck. Modems, faceplates, wire, cable and electrical tape are all examples of inventory.

Inventory includes both serialized and non-serialized items. Serialized inventory consists of individual pieces with serial numbers that identify both the type of equipment and the manufacturer/distributor.

Non-serialized inventory, such as faceplates, wire and electrical type do not have serial numbers. This type of inventory is generic. One manufacturer's supply can be exhanged for another based on a model number.

Non-serialized inventory is often accounted for in bulk by units of measure, such as feet, pounds, dozen, etc. These items are usually carried in the technician's truck, although the amounts required for individual activities are recorded along with serialized inventory on the Activities Detail screen and on the Inventories List in the technician's mobility device.

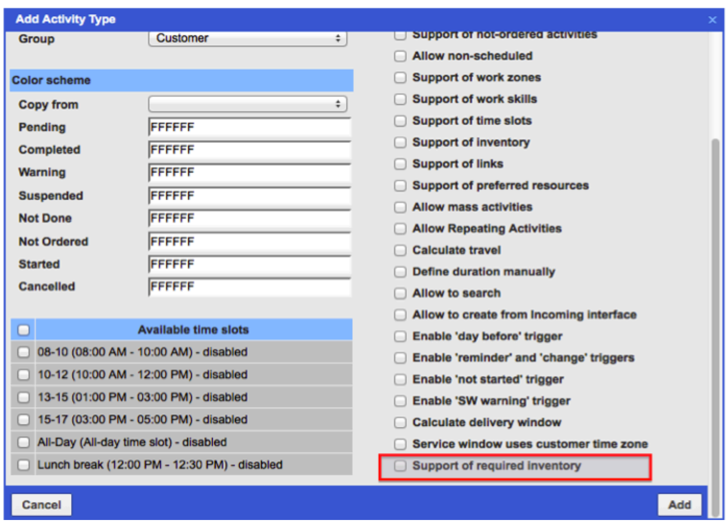


Adding an Inventory Type

Inventory types — both serialized (with serial numbers) and non-serialized (without) — can be entered and updated on the Company Settings menu.

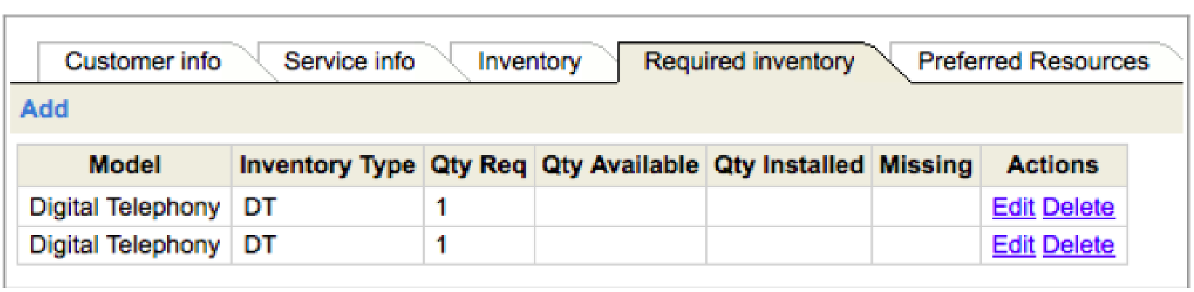
Follow these steps to add an Inventory Type to ETAdirect:

1. Login to the Manage module within ETAdirect.
2. Open the *Company Settings* menu
3. Select Add inventory type from the drop-down. The system displays the **Add inventory type** screen.
4. Enter a **Label** that will serve as a unique identifier for this Inventory Type.
5. Check the **Active** box to classify this inventory type as Active. Clear the checkbox to make an inventory type Inactive, meaning that it will display at the end of the Inventory Type list and *will not display* for selection in any drop-down menus.
6. Check the **Supports required inventory** box to indicate that this inventory type can be required for selected activities. Clear the checkbox when and if this inventory can no longer be required. (The *Activity Type* screen is used to make an Inventory Type required for an activity.)
7. Use the **Model Property** drop-down to select additional characteristics for this inventory type.
8. Enter a **Name** that makes this Inventory Type easy to identify. (If you leave this field blank, the system will use the Label you entered above to name the field.)
9. *Non serialized only*: Enter the **Unit of measurement** for this Non-Serialized **Inventory Type**. *Use the language and the current unit of measure for the country in which this Inventory Type will be used.*
10. Return to this screen when needed to modify or delete this inventory type.
11. Note: This Inventory Type can be made the required inventory for a particular activity type on the Activity Type screen pictured below.



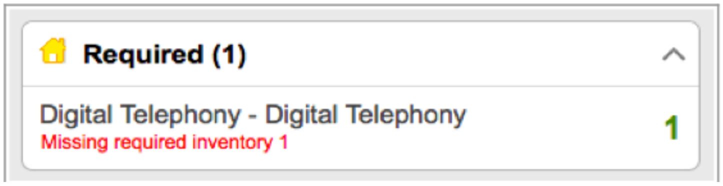
Working with Required Inventory

Both serialized and non-serialized inventory can be listed as Required for a particular activity on the Activity Details screen in Manage and on the Inventories List in Mobility



Model	Inventory Type	Qty Req	Qty Available	Qty Installed	Missing	Actions
Digital Telephony	DT	1				Edit Delete
Digital Telephony	DT	1				Edit Delete

ETAdirect monitors the required inventory that resources carry in their trucks against the quantities required for the day's activities and will warn them if they have run out of an item needed to complete their route.



Chapter

7

Monitoring

Topics:

- **Monitoring First Thing in the Morning**
- **Monitoring During the Day**
- **Monitoring at the End of the Day**

ETAdirect gives you a clear view of what is happening in the field in real time.

With one glance, you can tell who is currently working on which activity, if resources have the right amount of work, and whether activities are in jeopardy of losing their service window. ETAdirect gives you the information you need to address situations before they become problems.

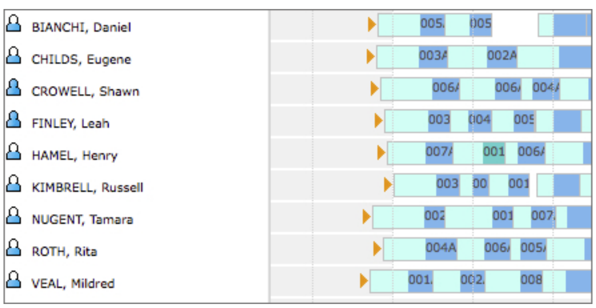
Monitoring First Thing in the Morning

At the beginning of the day, dispatchers and supervisors will want to verify that the resources' routes have been activated on time, the routes are efficient, and manual routing of new activities has been performed.

Checking for Route Activation

At the start of the shift, you can check the Resource Tree to verify that all of the resources have activated their routes. Perform the following steps:

1. In the Resource Tree, expand the bucket or buckets to see all of your resources.
2. Look for orange arrows at the beginning of the routes. The start route indicator should be visible at the resource's scheduled start time.



3. You can use the Resource Tree search filters to narrow the list to only the resources that have not activated their routes. Investigate the resources that do not have orange arrows at the starts of their routes.
4. For routes that should be active, contact the resources and ask them to activate their routes. Alternatively, you can activate the route on the resource's behalf.

Identifying Available Capacity

Follow these steps to make schedules more efficient, you can identify resources with available capacity on their schedules and then fill the idle time with activities. Follow these steps to find resources with available capacity:

1. In the Resource Tree, expand the bucket or buckets to see all of your resources.
2. Look for icons that are both white a blue. Icons that are completely blue indicate full loads.

   Icons that have some white space indicate less than full loads. See the following table for details:

	1/3 – resource has a low or no loading of activities.
	1/2 to 2/3 – resource has an average load of activities.
	Solid – resource has a load equal to or above the full load threshold and cannot take any additional work.

Note: The setting for the load threshold is configured in Company Settings.

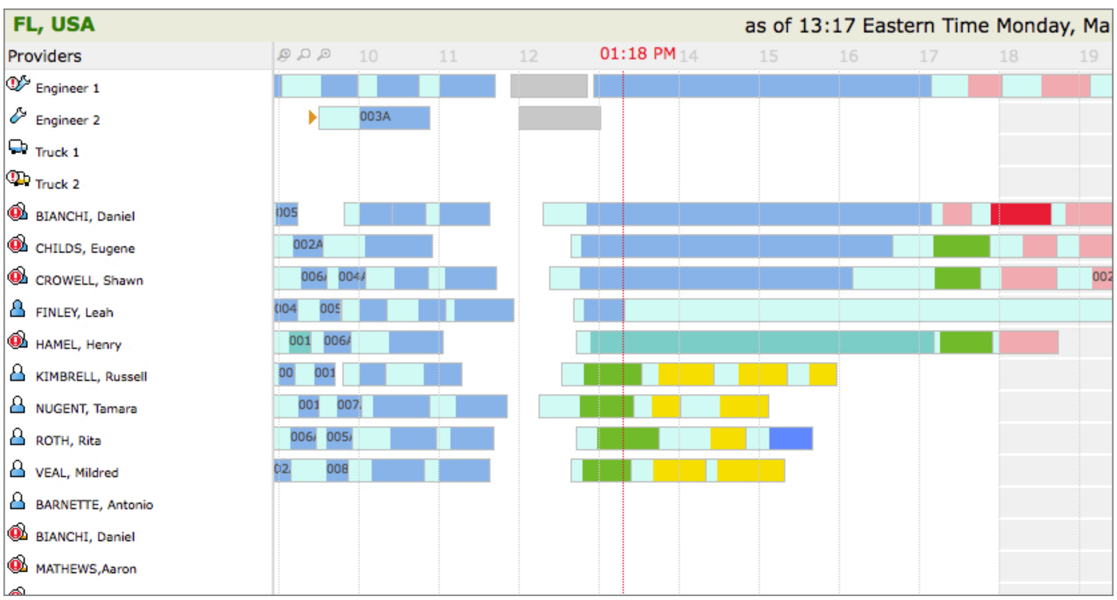
Monitoring During the Day

When monitoring routes, the most important thing to pay attention to is the vertical red line that travels across the screen.

This line represents the current time of day. Items to the left of the red line are in the past; items to the right of the red line are in the future.

Consider these actions to identify activities that might be in jeopardy of missing the service window. Look for blocks under the red line that are not dark green started activities or aqua green driving time.

If the activity is any other color, there is a chance that the resource will not arrive in time to meet the service window.



Actions to consider:

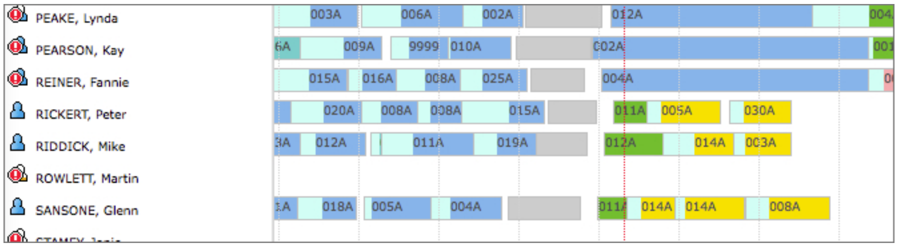
- Contact the resource to identify why the activity is not on schedule.
- If the resource forgot to start the activity, ask the resource to start the activity. If necessary, you can start the activity on behalf of the resource. See **Starting an Activity** for detailed instructions.
- If more time is necessary, ask the resource to add time to the activity. If necessary, you can add time to the activity on behalf of the resource. See **Adding Time to an Activity** for detailed instructions.
- If necessary, move the activity to another resource. See **Moving an Activity** for detailed instructions.
- If the resource starts the activity late or if adding time is necessary, review the route to look for future activities that may be affected. See **Identifying Jeopardy Situations** for detailed instructions.
- **Idle Time**

- If SmartLocation is available, turn on "Show Resource Trace" and monitor emplyee compliance.

Identifying an Add Time Situation

When an activity takes longer than projected, the resource must add time to the activity. Follow these steps to identify activities that might require more time, look for green Started activities that do not extend all the way to the red line.

Possible **Add Time** situation; time may need to be added to this activity.

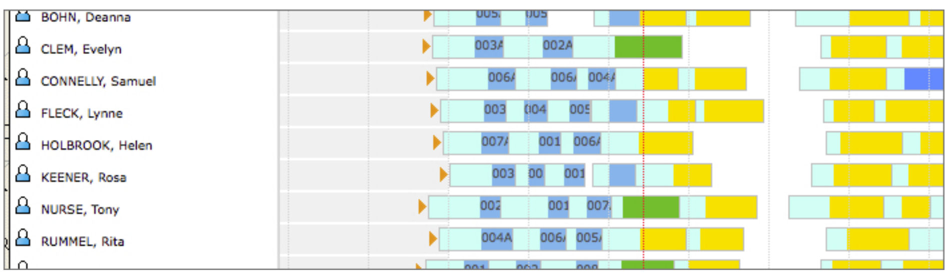


Actions to consider:

- Contact the resource to find out if a delay is necessary. If so, ask the resource to add time to the activity. If necessary, you can add time on behalf of the resource. See **Adding Time to an Activity** for detailed instructions.
- If adding time to an activity is necessary, review the route to look for future activities that may be affected. See **Identifying Jeopardy Situations** for detailed instructions.

Identifying a Late Start Activity

When a yellow or red pending order appears underneath the timeline.



If a yellow or red Pending order appears underneath the timeline, and the order before it is Completed (blue), one of the following situations is likely:

- The resource is still driving to the activity, but the drive is taking longer than predicted.
- The resource is at the activity, but has forgotten to start the activity in ETAdirect.
- The resource has started an activity, but forgotten to record the activity into ETAdirect.

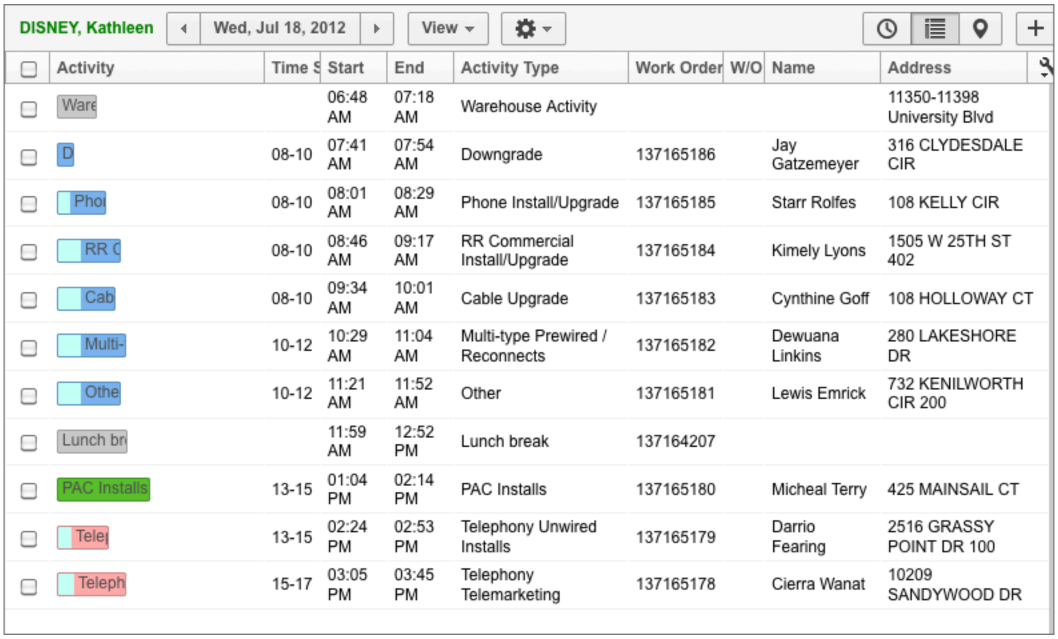
Action to consider:

- Contact the resource to determine why the activity is not started.
- If the resource forgot to start the activity, ask the resource to start the activity. If necessary, you can start the activity on behalf of the resource. See **Starting an Activity** for detailed instructions.
- If more time is necessary, ask the resource to add time to the activity. If necessary, you can add time to the activity on behalf of the resource. See **Adding Time to an Activity** for detailed instructions.
- If necessary, move the activity to another resource. See **Moving an Activity** for detailed instructions.
- If the resource starts the activity late or if adding time is necessary, review the route to look for future activities that may be affected. See **Identifying Jeopardy Situations** for detailed instructions.

Identifying Jeopardy Situations

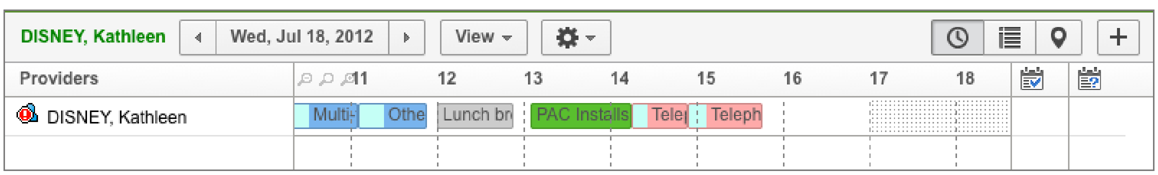
Jeopardy situations are easily identified by the red color on the List or Time view. A jeopardy situation means that the activity will miss its promised service window.

List View: Activity in jeopardy



DISNEY, Kathleen | Wed, Jul 18, 2012 | View

Activity	Time S	Start	End	Activity Type	Work Order	W/O	Name	Address
Ware		06:48 AM	07:18 AM	Warehouse Activity				11350-11398 University Blvd
D	08-10	07:41 AM	07:54 AM	Downgrade	137165186		Jay Gatzemeyer	316 CLYDESDALE CIR
Phoi	08-10	08:01 AM	08:29 AM	Phone Install/Upgrade	137165185		Starr Rolfes	108 KELLY CIR
RR C	08-10	08:46 AM	09:17 AM	RR Commercial Install/Upgrade	137165184		Kimely Lyons	1505 W 25TH ST 402
Cab	08-10	09:34 AM	10:01 AM	Cable Upgrade	137165183		Cynthine Goff	108 HOLLOWAY CT
Multi-	10-12	10:29 AM	11:04 AM	Multi-type Prewired / Reconnects	137165182		Dewuana Linkins	280 LAKESHORE DR
Othe	10-12	11:21 AM	11:52 AM	Other	137165181		Lewis Emrick	732 KENILWORTH CIR 200
Lunch br		11:59 AM	12:52 PM	Lunch break	137164207			
PAC Installs	13-15	01:04 PM	02:14 PM	PAC Installs	137165180		Micheal Terry	425 MAINSAIL CT
Telep	13-15	02:24 PM	02:53 PM	Telephony Unwired Installs	137165179		Darrio Fearing	2516 GRASSY POINT DR 100
Teleph	15-17	03:05 PM	03:45 PM	Telephony Telemarketing	137165178		Cierra Wanat	10209 SANDYWOOD DR



Time View: Activity in jeopardy

Actions to consider:

- Move the activity to a resource that has idle time. See **Identifying Idle Time** and **Moving an Activity** for detailed instructions.
- Move the activity back to the bucket to be rerouted later. See **Moving Activities Back to the Bucket** for detailed instructions.
- If the resource can arrive on time despite the warning, do nothing.

Identifying Resources that have Stopped Reporting

When the start time for an activity has passed and the activity is not started in ETAdirect, the resource has stopped reporting.

Follow these steps to identify resources that have stopped reporting:

1. Change your view to Time View.
2. In the Resource Tree, select the bucket or group that contains your resources. The routes are displayed.
3. Look for activities that have start times before the current time of day and are pink. Pink indicates that the activity is still pending and is late.

4. Contact the resource to identify why the activity is not yet started. If the resource forgot to start the activity in ETAdirect, ask him or her to start it now.

   If necessary, you can also start the activity on the resource's behalf.

Monitoring at the End of the Day

At the end of the day, dispatchers and supervisors will want to verify that the resources' routes have been deactivated on time, that all pending activities have been allocated for re-routing and that overtime situations are minimized.

Identifying Pending Activities

At the end of the day, any activities that are still pending must be allocated either to a new route or back to the bucket to be routed automatically.

Follow these steps to identify pending activities:

1. Change your view to Time View.
2. In the Resource Tree, select the bucket or group that contains your resources. The routes are displayed.
3. Look for activities that are yellow, pink or lime green. These colors indicate that the activity is pending. The way that you reconcile pending activities at the end of the day depends on your company's practices.

   ETAdirect provides the following options:

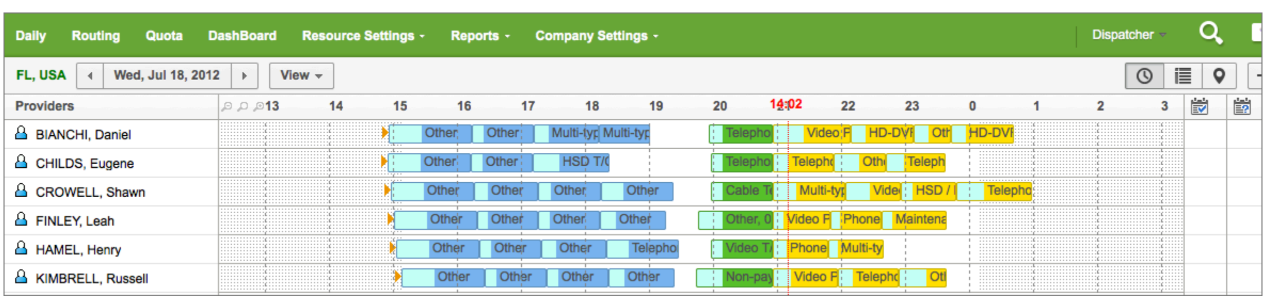
   - Move the activities back to the bucket so that ETAdirect can re-route them.
   - Manually move the activities to another route.
   - Change the activity status to Not Done.
   - Some companies run a script that automatically moves activities with Not Done status back to the bucket.

Identifying Overtime Situations

When resources have activities scheduled outside of their normal working hours, you might want to move those activities to another resource or another time slot.

Follow these steps to identify overtime situations:

1. Change your view to Time View.
2. In the Resource Tree, select the bucket or group that contains your resources.
3. The routes are displayed



4. Look for activities that extend beyond the white area into the grey area.

   - The white area represents the resource's shift.
   - The grey area represents time before or after the shift.

- If possible, move these activities to other resources or other time slots.
- Alternatively, move them back to the bucket so that ETAdirect can re-route them.

Checking for Route Deactivation

Before you can deactivate a route, you must reconcile any pending activities remaining on the route. See **Identifying Pending Activities** for more information.

Perform the following steps:

At the end of the shift, you can check the Resource Tree to verify that all of the resources have deactivated their routes. Routes must be deactivated so that ETAdirect calculations are accurate.

1. In the Resource Tree, expand the bucket or buckets to see all of your resources.
2. Check the color of the icons for each of your resources.
   - Blue icons indicate that the resource has activated the route.
   - Yellow icons indicate that either the route is inactive, or that the resource does not have a route.
   - Gray icons indicate that the route is deactivated.

   Note: You can use the Resource Tree search filters to narrow the list to only the resources that have not deactivated their routes.
3. Contact resources that have yellow and blue icons and ask them to deactivate their routes. If necessary, you can deactivate the route on behalf of the resource. See **Deactivating a Route or Queue** for details.

Chapter

8

Reporting

Topics:

- **Glossary**

The **Dashboard** contains a number of tables that provide a snapshot of the data gathered about your workforce.

You can use it to determine how well you are meeting customer expectations. For example, you could use the Percent of Customer Expectations Met report to monitor how often your resources start a job within the service window.

By checking this report at regular intervals, you could identify trends in your arrival time and make decisions about how to manage the workforce.

This section provides a high-level overview of how to configure the dashboard. For detailed information about configuration of the dashboard and a detailed explanations each report, see the **SmartReporting User Guide**.

Glossary

Action Link

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 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 withpending 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)
- *Prework:* appointment created by the Prework command. This command is applied to a regular appointment and creates a clone of it with the type prework to distinguish between the two. Prework 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-serlialized 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-seralized 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

Aare 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 ActivityAn 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-enabeled 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 **TeamwTeamwork on page 99ork** 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.