

$$\sum_{n=0}^{\infty} x^n$$

$$\sum_{n=0}^{\infty} \frac{x^n}{n!}$$

ORTEC Workforce Scheduling 7

# Implementation Manual

## Ad Hoc Planning



April 2025

$e^x$

$\frac{1}{\pi}$

$(k!)^4$

$\pi$

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# Table of Contents

<b>1</b>	<b>Overview</b>	<b>1</b>
1.1	Comparisons with other ORTEC apps	1
<b>2</b>	<b>Configuration and characteristics</b>	<b>2</b>
2.1	System configuration settings	2
2.2	Labor rules configuration	3
2.3	ORTEC WS Client settings	4
2.4	Permissions	4
2.5	Characteristics	4
<b>3</b>	<b>Screen conditions</b>	<b>5</b>
3.1	Home screen conditions	5
3.2	Schedule screen conditions	5
3.3	Proposal screen conditions	6
3.4	Shift offering screens conditions	6
3.5	Finished offers screen conditions	6



# 1 Overview

**ORTEC Ad Hoc Planning** enables organizations to respond quickly and efficiently to sudden changes in the work schedule. It uses relevant and current data to suggest the best possible replacement, providing continuity in terms of staffing and service quality.

 For shift offering, data of offered shifts and employees who requested a shift is stored in the Cloud. This means that restoring a backup in an environment that uses shift offering in Ad Hoc Planning can lead to corrupt data because the data in the cloud is not restored. This is why restoring a backup in this situation is not supported at the moment.

## 1.1 Comparisons with other ORTEC apps

- **ORTEC Workforce Scheduling** is a comprehensive scheduling tool with extensive features and configurability.
- **ORTEC WS for Team Schedulers** is used by schedulers to manage shifts.
- **ESS** is used by employees to view their schedule, request leave, indicate availability, swap shifts, and more.
- **ORTEC WS for Managers** or **Manager Self-service (MSS) App** provides managers with an overview of staffing, leave requests, and other administrative tasks.

# 2 Configuration and characteristics

In this chapter you will find additional information about the configuration and characteristics of the Ad Hoc Planning.

## 2.1 System configuration settings

The following settings in **System application** can be changed depending on configuration needs:

- **AdhocPlanning\General\PlanningHorizonDays**  
This setting is used to determine the length of the planning horizon in Ad Hoc Planning. The setting can take any integral value between 8 and 15. The default value is 8. If you enter a value lower than 8, the system will consider it as 8 and if you enter a value higher than 15, the system will consider it as 15.
- **AdHocPlanning\ShiftProposals\EmployeeAvailabilityAccount**  
This setting is used to set the account that will display a balance in the proposal screen of the **Ad Hoc Planning** for the employees listed. The value of this balance is also used to sort employees in the proposal screen in decreasing order.  
The default value is empty.
- **AdHocPlanning\ShiftProposals\BalanceExplanation**  
This setting is defines the text of the information label shown in the proposal screen. The text should explain the account used in the screen.  
The default value is an instruction for the administrator to modify the text.
- **Adhocplanning\Shifts\WorkTreatments**  
This setting determines which activities and consequently which shifts will be shown in the Ad Hoc Planning.  
The default values are:  
AMPLITUDE, OPERATIONS, OVERTIME, OVERTIMET, OVERTIMEM, RESERVE, SETTLE\_IN, SIDELINE, WORK, CONSIGNAT, PIKET, ON\_CALL, WORKSTANDBY, PRESENCE, PRESENCE\_LABOUR
- **Workforce.BackendDomainApis\CWSS\ServerNumber**  
This setting defines the server process the Ad Hoc Planning will be linked to, changing this value to an CWSS interface worker (e.g. server 49 or 50) is strongly recommended for load balancing purposes in case multiple servers are used.  
The default value is 1



Here's an overview showing the different settings that correspond with different applications in ORTEC System Configuration.

Important! Configure this directly during implementation, so performance problems can be prevented.

- **ORTEC WS Back-end API** used by ORTEC WS for Employees and ORTEC WS for Managers.  
Setting: Comtec.Workforce.Backend.API\InterfaceServerNumber
- **ORTEC Workforce Scheduling Back-end API** used by Ad Hoc Planning.  
Setting: Workforce.BackendDomainApis\CWSS

- **BackendEventPublisher\URLs**  
This is the setting where the the url is defined which synchronizes data between the **Ad Hoc Planning** and the **ORTEC WS server**. The default value <https://resintsvc-fa.azurewebsites.net/api/v1/ows-callback/receive-event> should be used to allow synchronization.
- **LaborRuleValidation\BalancingPeriods\DefaultPeriodType**  
This setting determines the period type used with labor rules that depend on balancing periods.
- **ShiftOffering\Employees\AccountName\_ForBalance**  
This setting is holds the name of the account which defines what account to use for balance in the details of shift offering responses. It should correspond with the category of the account which is described in the setting below.  
The default value is empty.
- **ShiftOffering\Employees\AccountCategoryName\_ForBalance**  
This setting is holds the name of the account category which defines what account to use for balance in the details of shift offering responses. It should correspond with the name of the account which is described in the setting above.  
The default value is empty.
- **ShiftOffering\Employees\UserPropertyName\_ForEmployee**  
This setting is holds the name of an employee property in **OWS Client** defining whether an employee can be offered a shift and receive a notification on the mobile phone and will be shown in the sent to list in **Ad Hoc Planning** after offering a shift. Default value is **True**.



- The property name is allowed to be used only once in the configuration of the departments.
- Only a yes/no property can be used.

- **ShiftOffering\Employees\ZeroHourContractCountAsOwnDepartment**  
When offering a shift to employees, this setting defines whether responses from employees with zero-hour contracts within the department are categorized as responses from inside or outside the own department. This is shown in the overview of who requested offered shifts and in the overview to who the shift is offered.



When individual data is changed (e.g., shift data, employment data needed for **Ad Hoc Planning**), this is triggered to integrate directly, but it can take a while (30 seconds) before the changed data is shown. To be sure all data is integrated, every 24 hours, all employee data is synchronized between the **ORTEC WS Client** and the **Ad Hoc Planning**.

## 2.2 Labor rules configuration


The labor rules used in the Ad Hoc planning to check on violations for employee proposals or shift offers are based by default on the Dutch ATW rules. However, if these rules need to be modified or expanded, the related query which can link a specific labor rule to an employee property for example, can be changed. This query is found here in the query section of the **ORTEC System Configuration** application:

- **BackEndDomainsAPI\LaborRuleValidation**

## 2.3 ORTEC WS Client settings

In order to make absences created in Ad Hoc Planning visible in the ORTEC WS planboard, you need to create a display setting by following these steps:


- In the ORTEC WS client, open the active display settings set.
- Go to the **background color** tab.
- In the **background color** tab, add the display setting **Ad Hoc Planning**.
- Place the display setting in an order between the other display settings.

 Newly added absences from Ad Hoc Planning are only visible after you refresh the ORTEC WS planboard.

## 2.4 Permissions

In order to have access to the Ad Hoc Planning, two permissions need to be activated before a user can log on to the application. These permissions are part of the **Applications** category and are the following:

- Ad-Hoc Planner (departments)
- Ad-Hoc Planner (employees)

 Be sure both permissions have the same linked departments for a user. The department permission is meant to authorize the user on department level. The employee permission is used to show the employees in the opened schedule.

Specific to the shift offering functionality, the following permissions in the **ORTEC WS for Employees** category:

- workonshiftwish.
  - 3 permissions are available to deal with already sent requests of shift offers:
    - Create
    - Edit
    - Remove

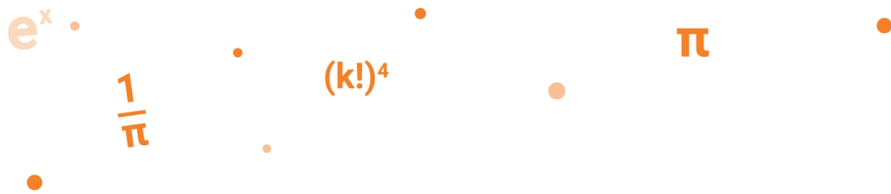
If the employee proposal functionality is used, a permission can be granted to view (and call) phone numbers of employees in the employee proposal screen:

- ORTEC WS Ad Hoc Planning/Phone Numbers in Adhoc Planner

## 2.5 Characteristics

Below an overview of the characteristics of the average user of Ad Hoc Planning:

Entity	Minimum	Average
Departments	1	5
Employees in a department	5	25
Employees working on a day	5	14



# 3 Screen conditions


The screens in the application are displayed following a number of conditions.

## 3.1 Home screen conditions

The design of the **Home** screen is based on a number of conditions:

On the top part of the screen, when multiple departments are listed, these will be sorted in the following manner:

- **Number of issues for today:** From high to low.
- **Number of issues for tomorrow:** From high to low.

 If a user has permissions for more than 20 departments, for performance reasons only the personnel problems for the first 20 departments are displayed alphabetically.

## 3.2 Schedule screen conditions

When opening a schedule the design of the screen will be based on the following conditions:

### Ordering conditions

Within the schedule screen of the Ad Hoc Planning, shifts are displayed according to conditions in their respective blocks:

- If shifts have a different begin and end time, they are ordered by begin time.
- If shifts have the same begin time and a different end time, they are ordered by end time.
- If shifts have the same begin and end time, they are ordered by shift name.
- If shifts have the same begin, end time and shift name, they are ordered by employee name.

Below an example of such ordering with the sorting trigger displayed in red:

Shift name	Begin time	End time
D1	07:00	16:00
B1	<b>07:30</b>	16:30
A1	07:30	<b>17:00</b>
<b>A2</b>	07:30	17:00

### Other conditions

- A vacant shift is shown as first shift if it has the same begin time, end time, and shift name.
- Shifts will be shown on the column day where the shift starts. For example, if a night shift starts on or after 0:00 it will be shown on the next day in category "Night".

## 3.3 Proposal screen conditions

The design of the **Employee Proposal** screen, accessible when clicking on the 'Propose Employee' button when attempting to fill an vacant shift, is based on the following ordering conditions:

- **Skills:** From available to unavailable.
- **Violations:** From low to high.
- **Balance hours:** From high to low.

Furthermore, if the permission **ORTEC WS Ad Hoc Planning/Phone Numbers** is granted, phone numbers of employees are shown and can also be called if the device is configured to make phone calls.

## 3.4 Shift offering screens conditions

The design of the different screens related to shift offerings overview that are accessed by clicking on the 'Staffing issues currently open for offer' row on the bottom part of the **Home** screen are based on a number of conditions. On both the **All shifts** and **Requested shifts** will meet the following ordering criteria:

- **Date:** Closest date on top, then sorted dates in the future.
- **Begin time of the shift:** From early to late.
- **Department:** Alphabetically.
- **Shift name:** Alphabetically.
- **Requested by count:** From high to low.

When clicking on any shift containing in the **Offered shifts** screen, the **Assign offered shift** screen is opened and contains two tabs:

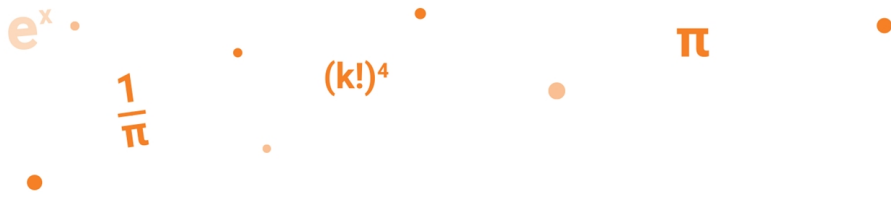
- The **Requested by** tab will group the employees by department and show the current department first, and then all other departments. The employees shown in the list are ordered by:
  - **Amount of violations:** From low to high
  - **Employee request:** From early to late.
- On the **Sent to** tab, the grouping and ordering is similar, but is expanded with the list of all the employees the shift was offered to but without applying the employee request ordering criteria.

## 3.5 Finished offers screen conditions

The design of the **Finished offers** screen, accessible by clicking on 'Finished offers' on the **Home** screen is based on the following conditions:

- **Date:** From most recent to oldest.

 Only offered shifts up to 7 days in the past are shown in this list.



## Contact information

For further information contact ORTEC, either through your existing ORTEC representative or by using the appropriate contact details listed on [www.ortec.com](http://www.ortec.com)

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