

On-Call Scheduling Guide

Overview



Note: This article applies to Fuji and earlier releases. For more current information, see *On-call Scheduling* ^[1] at <http://docs.servicenow.com>. **The ServiceNow Wiki is no longer being updated. Visit <http://docs.servicenow.com> for the latest product documentation.**

Overview

On-call scheduling provides a way to determine which member of a user group is available to complete a task. For example, finding the right person to assign an incident. It does this by rotating an on-call position within some or all members of that group of users on a regular basis.

On-call scheduling can help answer questions like:

- For a specific group, who is the primary contact person right now?
- Who is the primary contact at any given time?
- How do I escalate notifications for this group?
- When am I on-call for this group this year?

Administrators can activate the On-Call Scheduling application starting with the Eureka release.



Note: *On-Call Scheduling replaces Group On-Call Rotation starting with the Eureka release. If you are using an earlier release, see [Group On-Call Rotation - Versions Prior to Eureka](#). For information about upgrading to Eureka from an earlier version, see [Upgrading to On-Call Scheduling](#).*

Concepts

On-call schedules can contain:

- **Rota:** the calendar definition of on-call shift hours, personnel lists, and escalation settings such as escalation type and a catch-all for a group. Rotas define the time slots within which the duty schedule is active.
- **Rosters:** a list of users who are part of the schedule. Rosters define which users are assigned to which time slots within the rota.
- **Schedules:** the basic entity from which rotas and rosters are defined. For example, a company that wants coverage of tasks around the clock would use a 24-7 schedule. Companies that provide support around the globe, could use a *follow the sun* schedule to cover different time zones across different continents.
- **Holidays:** time off for participants in a rota can be planned and managed in the on-call calendars.
- **Escalations:** the chain of persons and the actions to be taken, for example, when a P1 incident comes in.
- **Notifications:** can be sent to remind people on-call of their obligations or if an important event occurs, either by sending emails with on-call scheduling, or by sending a voice mail or an SMS with Notify.

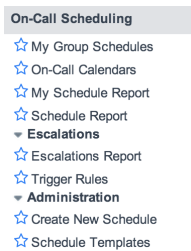
Roles

Role Title [Name]	Description
Rota Administrator [rota_admin]	Users with the rota_admin role can create new rotas and edit or delete existing rotas. They can also manage all other aspects of on-call rotas.
Rota Manager [rota_manager]	Users with the rota_manager role have delegated access to a specific group's rota and can manage this group's rota and associated data. They cannot edit or delete rotas.

For more information, see User Roles.

Menus and Modules

The On-Call Scheduling application contains these modules.



- **My Group Schedules:** View the schedules for your group.
- **On-call Calendars:** View calendars and manage schedules.
- **My Schedule Report:** Determine when you are on-call and what the escalation chain is. For more information, see Viewing My Schedule.
- **Schedule Report:** Generate reports about on-call schedules.
- **Escalations**
 - **Escalations Report:** Determine how an incident should be escalated for a certain roster.
 - **Trigger Rules:** Define escalation trigger conditions and actions.
- **Administration**
 - **Create New Schedule:** Create new schedules with a simplified wizard.
 - **Schedule Templates:** Define schedule templates that can be used in the Create New Schedule wizard.

Activating On-Call Scheduling

Administrators can activate the On-Call Scheduling plugin.

Click the plus to expand instructions for activating a plugin.

If you have the admin role, use the following steps to activate the plugin.

1. Navigate to **System Definition > Plugins**.
2. Right-click the plugin name on the list and select **Activate/Upgrade**.

If the plugin depends on other plugins, these plugins are listed along with their activation status.

3. [Optional] If available, select the **Load demo data** check box.

Some plugins include demo data—sample records that are designed to illustrate plugin features for common use cases. Loading demo data is a good policy when you first activate the plugin on a development or test instance. You can load demo data after the plugin is activated by repeating this process and selecting the check box.

4. Click **Activate**.

Enhancements

Eureka

- An enhanced on-call wizard feature is available. The previous functionality, **Create New Rota** and **Manual Rota Creation**, is deprecated.
- Workflows for on-call assignment of incidents and sending notifications in the case of escalations have been introduced. Notification rules on rotation schedules are deprecated. They have been superseded by these workflows. When an instance running Group On-Call Rotation upgrades to Eureka, some data from the notification rules is migrated to other tables. The information migrated is recorded in the Notification rules -

migration report, which can be run by the administrator in **Reports > View/Run**.

- The **Rotate through rosters** option has been added to the My Group Schedules module as part of the escalation settings on the rota form. This method of going through the escalation chain facilitates users who may not be the first on-call person for a roster to identify themselves easily when they are on-call. When more than one roster is available for a rota, the option **Rotate through rosters** is automatically activated.
- The method for changing rotas and rosters through the on-call calendar view has been improved.
- An option has been added to the schedule report that prints a PDF file showing an overview of the on-call persons per group for a specified period.
- Domain separation is supported. The rota group's domain is used rather than the logged in user's domain.
- When you use Notify with on-call scheduling, additional workflows enable users to receive notifications and accept or reject auto-assignment via SMS.

References

- [1] https://docs.servicenow.com/bundle/jakarta-it-service-management/page/administer/user-administration/concept/c_OnCallScheduling.html

Upgrading to On-Call Scheduling

Overview

Group on-call rotation is replaced with on-call scheduling starting with the Eureka release. Upgrading from a previous versions is completely automatic, and all events are recorded in the upgrade logs (**System Diagnostics > Upgrade History**).

1. The existing On-Call plugin has been changed in Eureka. When you upgrade to Eureka, the plugin changes will be applied automatically (this is not optional).
2. The group device functionality is deprecated in Eureka in favor of a **Catch All** person.
3. On-call Scheduling replaces the existing business rules for escalations with escalations based on Graphical Workflow.
4. The workflow uses Notification Activities, so it will send emails and not SMS messages. It must be modified to use Create Events activities to send SMS messages.

Keep these and the following changes in mind as you transition to On-Call Scheduling.

On-Call Wizard

The **Create New Schedule** module presents an enhanced wizard for creating schedules. This wizard enables users to create a basic rotation schedule and one or more rosters, along with escalation and reminder settings. The **Create New Rota** module and the option for manually creating rotas are deprecated.

Trigger Rules

When an instance running group on-call rotation upgrades to Eureka, some data from the notification rules is migrated to other tables. The migrated information is recorded in the Notification rules - migration report, which can be run by the administrator in **Reports > View/Run**.

Trigger rules supersede the **On-call Rotation Notify** and **On-call Rotation Cancel** on-call business rules used in previous releases. If you customized on-call business rules in previous versions, you must deactivate these business rules before you can work with trigger rules.

Option Rotate Through Rosters

The **Rotate through rosters** option has been added to the My Group Schedules module. Navigate to **On-Call Scheduling > My Group Schedules** and choose a rota to view this setting. It is part of the Escalation settings. The option is automatically used when there is more than one active roster. It helps to prevent on-call users from being their own backups, as the on-call lineup order is staggered by one for each roster.

Additional Workflows for Notify

Workflows have superseded the notification rules on rotation schedules, starting with the Eureka release. Some example workflows are provided in the demo data available with the plugin. When you upgrade an instance running group on-call rotation to Eureka, some data from the notification rules is migrated to other tables. The migration results and detailed messages about migrated records are visible in the Notification rules - migration report, which can be run by the administrator in **Reports > View/Run**.

Please be aware that in On-Call Scheduling some business rules related to escalations and notifications were deprecated and replaced with workflows. For more information, see the table that compares business rules and workflows.

When you use Notify with on-call scheduling, additional workflows enable users to receive notifications and accept or reject auto-assignment via SMS.

Installed Components

Overview

Activating the On-Call Scheduling plugin adds or modifies tables, user roles, script includes, and other components. Demo data is available with on-call scheduling.

Tables

On-call scheduling adds or modifies the following tables.

Display Name [Table Name]	Description
On-call Member [cmn_rota_member]	Table with the selected group members participating in the on-call schedule and escalations.
Roster [cmn_rota_roster]	The table that determines the members on-call, the rotation interval and escalation settings.
Rota [cmn_rota]	The table that holds the on-call schedule for a particular shift.
Schedule Span [cmn_schedule_span]	Table that contains the schedule span definitions. On-call scheduling adds a group reference and the On-call type to the Type field.
Trigger Rule [trigger_rule]	This table extends the Assignment Rule [sysrule_assignment] table and stores when the escalation process is triggered and what actions to take.

Plugins

On-call scheduling activates the following additional plugins and has the following dependencies.

Plugin Name	Plugin ID	Description
Graphical Workflow	com.glideapp.workflow	Trigger rules can invoke a workflow which determines who to notify in the on-call schedule.
Subscription Based Notifications	com.glide.notification	In the notification preferences of the user record, you can define the preferred method of communication. This can be email, SMS, voice mail or Instant messaging. The available options depend on the preferred devices that have been defined for the user.
Advanced Schedules Support	com.glide.schedules	This functionality is used to define on-call rotation schedules (for example, a 24x7 schedule).

User Roles

On-call scheduling adds the following user roles.

Role	Contains Roles	Description
rota_admin	assignment_rule_admin	Users with the rota_admin role can create new rotas and edit or delete existing rotas. They can also manage all other aspects of on-call rotas and rosters (duty shifts).
rota_manager	-	Users with the rota_manager role have delegated access to a specific group's rota and can manage this group's rota and associated data. They cannot edit or delete rotas.

UI Actions

On-call scheduling adds the following UI actions.

UI Action	Table	Description
Change active	Roster [cmn_rota_roster]	Changes active roster member.
New	Roster [cmn_rota_roster]	Creates new roster.
Resend Reminders	Rota [cmn_rota]	Sends reminders to a particular rota. Users with the admin and rota_admin roles can resend reminders.

UI Policies

On-call scheduling adds the following UI policies.

UI Policy	Table	Description
Catch-All is Group Manager	Rota [cmn_rota]	Make the Manager field visible if the catch-all is the Notify group manager.
Catch-All is Notify All	Rota [cmn_rota]	Make the Catch-all roster field visible and mandatory if the catch-all is notify all.
No Reminders	Rota [cmn_rota]	Hide the Reminder lead time field if send on-call reminders is false for the rota table.
Group Manager should always be read-only	Rota [cmn_rota]	Make the group manager field read-only.
Catch-All is Individual	Rota [cmn_rota]	Make the Catch-all member field visible if the catch-all is Notify individual.
Force device to Email warning	Roster [cmn_rota_roster]	Script to send a warning if the on-call member does not have an Email device to communicate that the user will not be contacted. Installed with Notify.
Force device to SMS warning	Roster [cmn_rota_roster]	Script to send a warning if the on-call member does not have an SMS device to communicate that the user will not be contacted. Installed with Notify.
Hide for Daily Rotations	Roster [cmn_rota_roster]	Hide the rotation_all_day and rotation_start_time fields if the rotation interval is daily.
Weekly Rotations Not All Day	Roster [cmn_rota_roster]	Show the rotation_start_time field if the rotation interval is weekly and all day rotation is false.
Weekly Rotations All Day	Roster [cmn_rota_roster]	Hide the rotation_start_time field if the rotation interval is weekly and all day rotation is true.
No Reminders	Roster [cmn_rota_roster]	Hide the Reminder lead time field if send on-call reminders is false for the rota table.
Show correct trigger action	Trigger Rule [trigger_rule]	Show trigger_script field and hide trigger_workflow field if the trigger action is a script.

Script Includes

On-call scheduling adds the following script includes.

Script Include	Description
OnCallFilters	Reference qualifiers for on-call rota or roster lookup.
OnCallReminderEmailGenerator	Generates an HTML email used to send reminders to users that have on-call duty.
OnCallRemindersNG	This is run by a schedule job to send reminders to on-call persons on a daily basis.
OnCallRotation	Group On-Call Rotation convenience wrapper class to use in business rules: <code>gs.include("OnCallRotation"); var rota = new OnCallRotation(current);</code>
OnCallRotationCalculator	Calculate the rotation for a group, storing the results in the Rotation Schedule [v_rotation] table.
OnCallRotationPersonal	API for quickly getting on-call rotation data relevant to current logged in user.
OnCallRotationRecalc	Recalculates on-call rotation schedules. Called from Update Rotation Schedules business rules on On-call Member [cmn_rota_member] and Roster [cmn_rota_roster] tables.
OnCallScheduleGenerator	Generates a schedule in table form for any given groups for a specified date range.
OnCallSecurity	Checks security for an on-call rotation rota.
OnCallSecurityNG	New security model checks for on-call rotas, rotations, and associated data. Access model: <ul style="list-style-type: none"> 'rota_admin' role gives access to manipulate all aspects of rotas. 'rota_manager' role gives access to a specific group's rota and can manipulate this group's rota and associated data. 'roster_admin' role gives access to manipulate all aspects of rotas. This model is deprecated starting with the Eureka release.
OnCallUserReminder	User reminder data for sending on-call user reminder emails. Used by the <i>On-Call Reminders NG</i> script include.
RotaScheduleEntryValidation	Specific validation for rota schedule entries. Called by Rota Schedule Item Validate business rule.
RosterMember	Handles roster and member requests.
FormattedScheduleReport	Reports the on-call schedule for the selected groups or the given rotation in the a time span.

Client Scripts

On-Call Scheduling adds the following client scripts.

Script	Table	Description
Handle Group Visibility	Schedule Entry [cmn_schedule_span]	Handles group visibility when creating schedule entries for on-call.
Question Choice Related List	Question [question]	Handles the choice related list when sending on-call notifications.

Business Rules and Workflows

The following business rules have been deprecated and were replaced by the following workflows, starting with the Eureka release.

Business Rule Name	Workflow name	Description
On-Call Assign (current)	On-Call: Assign	Assign the current on-call resource to the incident instantly.
No business rule previously	On-Call: Assign and Notify	Assign the current on-call resource to the incident instantly and notify the on-call resource via SMS. Requires that Notify is active.
On-Call Assign (Current or Next)	Deprecated	The business rule is no longer supported.
No business rule previously	On-Call: Assign by Acknowledgement	Notify the current on-call resource of the incoming incident and ask them to acknowledge it to assign it. If not acknowledged, escalation plan is executed. Requires that Notify is active.
On-Call Rotation Notify	On-Call: Escalations by Email	Use email to notify members on the escalation plan until escalation plan is exhausted or incident is assigned. Requires that Notify is active.
On-Call Rotation Cancel	Same as above	The business rule has been combined in the On-Call: Escalations by Email workflow and a separate process is not needed.

Using On-Call Scheduling



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Overview

Users with the itil role can use on-call scheduling functions to:

- View schedules for their groups
- View their personal schedule
- View calendars
- View reports

Viewing My Group Schedules

Navigate to **On-Call Rotation > My Group Schedules** to see the schedules for groups that you are a member of. Open a schedule to see the details.

Viewing My Schedule

You can view when you are on-call and the escalation lineup for a particular date range.

- 1. Navigate to **On-Call Scheduling > My Schedule Report**.
- 2. In **Show for**, select a date range.
- 3. Click **Submit**.

User Rotation SchedulesGo toStart date time

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<<<1to 6 of 6>>>

All > > User = Beth Anglin

User	Rota	Roster	Type	Start date time	End date time
Beth Anglin	Service Desk (24x7)		Notify Manager	2014-04-30 02:00:00	2014-06-01 00:00:00
Beth Anglin	Service Desk (24x7)	Primary	On-call	2014-05-01 00:00:00	2014-05-05 00:00:00
Beth Anglin	Service Desk (24x7)	Tertiary	On-call	2014-05-05 00:00:00	2014-05-12 00:00:00
Beth Anglin	Service Desk (24x7)	Secondary	On-call	2014-05-12 00:00:00	2014-05-19 00:00:00
Beth Anglin	Service Desk (24x7)	Primary	On-call	2014-05-19 00:00:00	2014-05-26 00:00:00
Beth Anglin	Service Desk (24x7)	Tertiary	On-call	2014-05-26 00:00:00	2014-05-31 23:59:59

Actions on selected rows...

<<<1to 6 of 6>>>

- This shows the rota, the roster, and the start and end times for each timeslot.
- 4. To view alternate rosters, expand an entry by clicking the arrow.

User Rotation SchedulesGo toStart date time

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<<<1to 6 of 6>>>

All > > User = Beth Anglin

User	Rota	Roster	Type	Start date time	End date time
Beth Anglin	Service Desk (24x7)		Notify Manager	2014-04-30 02:00:00	2014-06-01 00:00:00
Beth Anglin	Service Desk (24x7)	Primary	On-call	2014-05-01 00:00:00	2014-05-05 00:00:00
Beth Anglin	Service Desk (24x7)	Tertiary	On-call	2014-05-05 00:00:00	2014-05-12 00:00:00
Beth Anglin	Service Desk (24x7)	Secondary	On-call	2014-05-12 00:00:00	2014-05-19 00:00:00
Beth Anglin	Service Desk (24x7)	Primary	On-call	2014-05-19 00:00:00	2014-05-26 00:00:00
Beth Anglin	Service Desk (24x7)	Tertiary	On-call	2014-05-26 00:00:00	2014-05-31 23:59:59

Actions on selected rows...

Alternate rostersGo toRoster

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2 Alternate rosters

Alternate Rotation Schedules

David Loo	david.loo@example.com	Primary	1
ITIL User	itil@example.com	Secondary	2

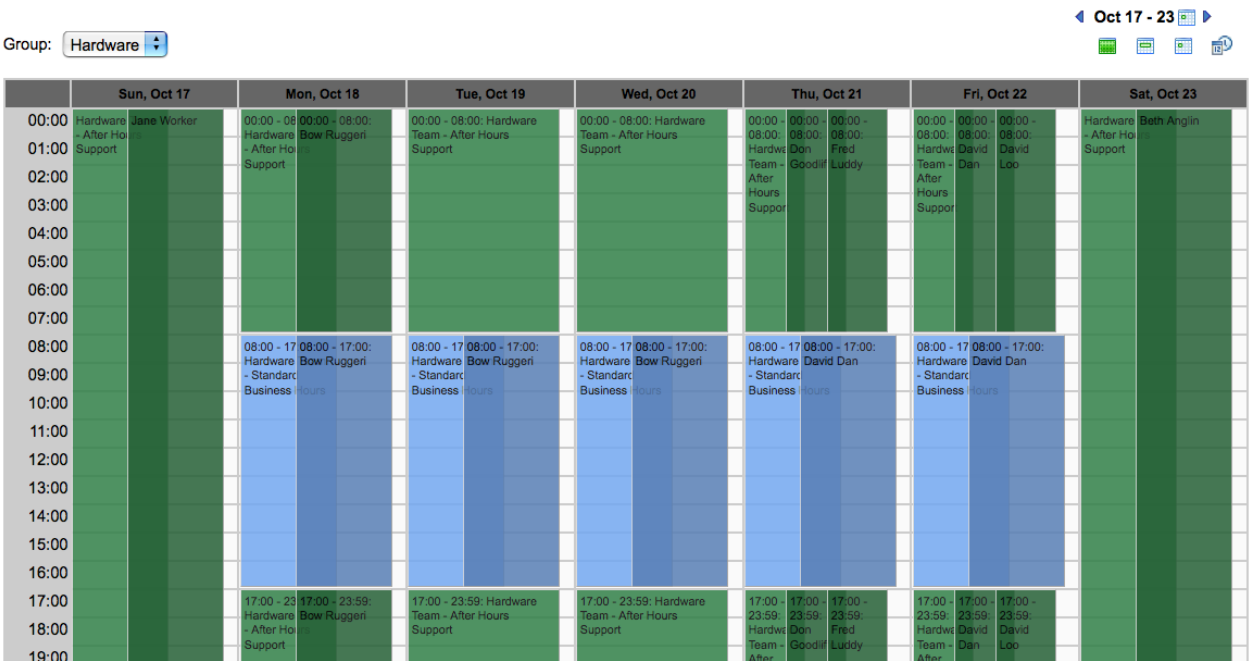
Actions on selected rows...

<<<1to 6 of 6>>>

This shows other rosters for that timeslot. For example, if you are the primary contact, this shows secondary and tertiary contacts for that timeslot.

Viewing Calendars






A calendar shows the rotation schedule in light blue and the roster in deep blue for a specific rotation. If there is more than one rotation schedule on a particular day, the secondary rotation is shown in green and the tertiary in yellow.



On-call calendars provide a way of visualizing the on-call rotation for a group. Navigate to **On-Call Scheduling > On-Call Calendars**. Initially, the display defaults to the first group with a roster. In the **Group** choice list, select the group you are interested in.

Each time slot specified for the group's roster is displayed along with the on-call person assigned to that slot.

To navigate in the calendar:

- Use the  ,  , and  buttons to change the calendar's display to monthly, weekly, and daily views respectively.
- Use the left and right arrows beside the date to move the calendar back and forward in time.
- Use the  icon beside the date to move to a specific date.
- Use the combined calendar and clock  icon to view the calendar as a timeline. The on-call shifts are shown as horizontal bars for each day. By default one week is shown. Use the + and - buttons to expand or collapse the timeline to 21, 35, 49, 63 days and so on.

Viewing Reports

Schedule Report

To produce a report of users who are on-call or catch-all for one or more groups during a specific time period:

1. Navigate to **On-Call Scheduling > Schedule Report**.
2. Select the start and end dates for the report.
3. Enter the first few letters of the desired group into the **Name** field to see a list of groups that start with those letters, or select the **All groups** check box to see a list of all available groups.
4. Select at least one group in the slushbucket.
5. For **Report style**, select:

- **Table:** to display the report on-screen. as a list that can be sorted, filtered, and configured like other lists.
- **Formatted:** to generate a report in PDF format.

6. Click **Run Report**.

7. If you selected **Formatted**, click the **Click to Print** button to print the report.

The report shows the on-call commitments for all selected groups during the selected date range.

The printed report looks like this:

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ServiceNow

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Network Schedule(s)	Roster	Shift	2014-03-06 Thursday
Network (EMEA)	Primary	00:00:00 - 07:00:00	David Dan
		23:00:00 - 23:59:59	David Dan
Network (Americas)	Primary	07:00:00 - 15:00:00	Fred Luddy
	Secondary	07:00:00 - 15:00:00	ITIL User
Network (APAC)	Primary	15:00:00 - 23:00:00	Bow Ruggeri
	Secondary	15:00:00 - 23:00:00	David Loo
Service Desk Schedule(s)	Roster	Shift	2014-03-06 Thursday
Service Desk (24x7)	Primary	00:00:00 - 23:59:59	David Loo
	Secondary	00:00:00 - 23:59:59	ITIL User
	Tertiary	00:00:00 - 23:59:59	Beth Anglin

Escalations Report

To generate the escalations report, navigate to **On-Call Scheduling > Escalations > Escalations Report**. The escalations report shows you what the escalation sequence is and which rules apply for the selected date. For each group, you can choose to show either the active roster members or the on-call person. If you choose active roster members, the on-call persons and catch-all persons are listed in the escalation order, along with their delay times. If you choose the on-call person, you can quickly find out who is currently on duty.

In both reports, you can see the on-call persons only for the groups you are authorized to see. If you select a group you have no authorization for, a message appears stating that a number of rows have been removed due to security constraints. Security restrictions apply only if high security is active on the instance. High security is active by default for all new instances.

On-Call Reminders

On-call scheduling includes a scheduled job called **On-Call Reminders**. This job runs the *OnCallRemindersNG* script include daily to check if any on-call members need to be notified about upcoming on-call commitments.

To define the number of days before email reminders are sent to users:

1. Navigate to **On-Call Scheduling > On-Call Calendars**.
2. Right-click the Rota.
3. Select **Edit rota**.
4. Change the **Reminder lead time (days)** field for the on-call schedule record or any of its rosters.

The reminder lead time defined on a roster is always respected. If no lead time is defined, the on-call schedule's reminder lead time is used. If the reminder lead time is not defined for either the on-call schedule or its rosters, then a default of 2 days is used.



Note: Keep in mind that the **Reminder lead time** on the Roster form is different from the **# reminders** and **Time between reminders** fields in the Escalation Settings section of the form. The escalation settings are only used to configure reminders for escalations. The **Reminder lead time** is in the Reminder Communication section of the Roster form, and is used to email reminders for upcoming on-call commitments.

Users with the admin or rota_admin role can resend reminders, which can be useful to inform group members about changes in their shift.

1. Navigate to **On-Call Scheduling > My Group Schedules**.
2. Open a specific rota.
3. Click **Resend reminders**. The option is also available when editing a rota for a group in **On-Call Calendars**.

Creating an On-Call Schedule



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Overview

A simple way to set up a new on-call schedule is by using the wizard functionality.

On-call scheduling can easily be used with Notify, which can send notifications by SMS and voice mail. See *Using Notify with On-Call Scheduling*.

After running the on-call wizard, you can adjust individual rosters, and escalation and reminder settings to fine-tune your setup. You can also enable on-call notifications by setting up rotation workflow triggers.

Users with the rota_admin role can run the wizard, create rotas, and manage rosters.

Using the On-Call Wizard

The on-call wizard is a simplified way of creating a schedule that is available starting with the Eureka release. If you are using an earlier version, see previous version information.

Setting up

To set up a new on-call schedule, navigate to **On-call Scheduling > Administration > Create New Schedule**.

The wizard is made up of three pages which guide you through the setup process:

- Basic Information
- Schedule Definition
- Escalation and Notifications

Basic Information

This page collects the following information to start the setup process.

Question	Description
What would you like your schedule's name to be?	The friendly name users will see when they view the rotas.
Which group does this schedule apply to?	<p>The group this on-call schedule affects. Only users who belong to this group can be added as members of this schedule's rosters.</p> <p>A group is not allowed to have multiple overlapping schedules. For example, if a group already has a 24x7 schedule, you cannot create any more schedules for the same group. However, if a group has an 8 A.M. to 8 P.M. schedule, you can create an 8 P.M. to 8 A.M. schedule for the same group.</p>
When would you like your new schedule to begin?	The starting date for the on-call schedule. By default, this value is set to be the current date.

Schedule Definition

This page collects the following configuration data about the schedule's times and repetitions.

Question	Description
Would you like to use an existing schedule?	The simplest way to create a rotation schedule is to select Yes and select one of the predefined options in the next question. Select No to set up the schedule's configuration manually.
What type of schedule would you like to use?	By default, some options are available, for example, 24x7, Workday 8-5. The values selected here are used to build your schedule. This question appears only if you answer Yes to the first question. The logged in user's time zone is used to build these schedules. If the logged in user does not have a time zone specified, the system time zone is used.

The remaining questions apply only if you are building your own schedule and not using an existing one.

Question	Description
What would you like your new schedule's name to be?	The friendly name of the schedule that will appear on the On-call calendar page. By default, the name is the same as the name specified on the Basic Information page.
Is the shift for this schedule all day?	Option for indicating whether each shift is a 24-hour shift. If you select Yes , the shift start time is reset to 00:00:00 and the end time is no longer required.
When must the shift for your new schedule start?	The time of day the shift is scheduled to start. For a 24-hour shift, this is set to 00:00:00
When must the shift for your new schedule end?	The time of day the shift is scheduled to end. The start and end time need to represent one shift, and the date portion of the setting is only different if the shift spans midnight. For example, for the 8 A.M. to 8 P.M. shift, the start is 2014-01-01 08:00:00 and end will be 2014-01-01 19:59:59. For the 8 P.M. to 8 A.M. shift, the start is 2014-01-01 20:00:00 and the end is 2014-01-02 07:59:59. This field is available only for shifts that are not 24-hour.

In which time zone does your schedule apply? By default the logged in user's time zone is selected. If the schedule needs to be set up in a different time zone, change the value here.

How often does 1 shift repeat? The days that the shift repeats, such as **Daily**, **Weekly**, or **Every Weekday (Mon-Fri)**. By default, several repetition options are supplied that cover the most likely repeats. If the value needed is not supplied in the list, select the closest match and manually edit the repetition after the on-call schedule has been generated.

The repetition interval determines how long it will take to rotate each member in the schedule. For example, if you select **Daily**, then each member's shift in the schedule rotates on a daily basis. If you select **Weekly**, then each shift continues for a week before rotating to the next member in the roster.

The wizard does not provide a *monthly* or *yearly* option. Although it is technically possible to create a shift that repeats on a monthly or a yearly basis by editing the schedule manually, this is not advised. The results of such a schedule become less predictable, because it is hard to determine who is the on-call person over such a long period of time. In this case, it is advisable to create a yearly or a monthly schedule with only one roster and one member. This way, the same person is always on-call. Any exceptions can then be made as a one-time change in the roster.

The values on this page must meet the following guidelines before you can navigate to the next page of the wizard.

- The start of the shift must be before the end.
- The schedule configuration here must not overlap an already existing schedule for the same group. For example, do not configure a daily 8 A.M. to 8 P.M. schedule for the **Service Desk** group if it already has a 24x7 schedule.
- The values in shift start, end, and repeat fields must not create an overlapping schedule. For example, a daily repeating shift of 8 A.M. to 9 A.M. the next day.

Escalation and Notification Setup

Create On-Call Schedule

Edit Panel

Escalations and notifications setup

Information about the escalations in your On-Call Schedule.

Please note that these settings can always be changed at a later point. Consult the wiki for more information.

How many duty rotations are there in your On-Call schedule?

More information

1

Which members would you like to be in your schedule?

More information

Collection

Search

Beth Anglin
David Dan
Don Goodliffe
ITIL User

Add

Remove

List

Bow Ruggeri
David Loo
Fred Luddy

Notification settings

How many reminders should be sent out before escalating?

More information

1

How long should we wait until sending the next reminder?

More information

15 minutes

This page collects information about the users to be included on the rota and the escalation settings.

Question	Description
How many duty rotations are there in your on-call schedule?	The simplest on-call schedule can be set up with only one roster available. Selecting more than one generates multiple rosters with the same members shifted by one position in each.
Which members would you like to be in your schedule?	Select from the people in the group selected on the Basic Information page.
How many reminders should be sent out before escalating?	When any escalations are configured for this group, the system first sends group members the number of reminders designated here before notifying the backup personnel.
How long should we wait until sending the next reminder?	By default, there is a 15 minute wait before the next reminder is sent. If the needed value is not available, select the closest match and manually edit the number of reminders after the on-call schedule has been generated. This can be done by editing the roster and changing the Time between reminders in the escalation settings.

Results After Completing the Wizard

When you click **Next** on the Escalations and notifications setup page, the following actions occur:

- One on-call schedule is created with the name you specified.
- For the number of duty rotations indicated, a roster is created.
 - Each roster follows the schedule specified in the wizard.
 - A lineup of the selected members from the group is created. For multiple duty rotations, the order of the members is offset by 1 to prevent scenarios where users are scheduled as their own backup during an escalation.
 - Escalation settings are created.

Rotation schedules for 'Primary My New Rotation Schedule' have been updated

Group: Hardware

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			January 1 * My New Rotation Schedule	2 * My New Rotation Schedule	3 * My New Rotation Schedule	4 * My New Rotation Schedule
5 * My New Rotation Schedule	6 * My New Rotation Schedule	7 * My New Rotation Schedule	8 * My New Rotation Schedule	9 * My New Rotation Schedule	10 * My New Rotation Schedule	11 * My New Rotation Schedule
12 * My New Rotation Schedule	13 * My New Rotation Schedule	14 * My New Rotation Schedule	15 * My New Rotation Schedule	16 * My New Rotation Schedule	17 * My New Rotation Schedule	18 * My New Rotation Schedule
19 * My New Rotation Schedule	20 * My New Rotation Schedule	21 * My New Rotation Schedule	22 * My New Rotation Schedule	23 * My New Rotation Schedule	24 * My New Rotation Schedule * Bow Ruzgeri (Primary)	25 * My New Rotation Schedule * Bow Ruzgeri (Primary)
26 * My New Rotation Schedule * Bow Ruzgeri (Primary)	27 * My New Rotation Schedule * Bow Ruzgeri (Primary)	28 * My New Rotation Schedule * Bow Ruzgeri (Primary)	29 * My New Rotation Schedule * Bow Ruzgeri (Primary)	30 * My New Rotation Schedule * Bow Ruzgeri (Primary)	31 * My New Rotation Schedule * David Los (Primary)	

Rota Escalations

The rota escalations are set after the wizard has been completed. **Escalation type** determines the order in which certain members of a group are notified about the escalation. The escalation type depends on the number of rosters. Its value is automatically set to **Rotate Through Members** if a rota has only one roster. The escalation chain goes through all members of that roster. If a rota has more than one roster, its value is **Rotate Through Rosters**. The escalation chain goes through all the rosters to determine who to notify.

Catch-all identifies the user who should receive notifications in case none of the persons who are on call accepted the incident assignment. It can be none, a group manager, an individual, or all roster members.

To change the rota escalation settings:

1. Navigate to **On-Call Scheduling > My Group Schedules**.
2. Choose the rota you want to edit.
3. Change the escalation settings.
4. Click **Update**.

Rota Reminders

The **Send on-call reminders** and **Reminder lead time (days)** settings send an email notification to the person on call a specified number of days before the on-call obligation. The reminder is sent to the email address specified in the user record, unless specified otherwise in the notification preferences. If notification preferences have been defined, they take precedence over the user record.

To change the rota reminder settings:

1. Navigate to **On-Call Scheduling > My Group Schedules**.
2. Choose the rota you want to edit.
3. Change the reminder settings.
4. Click **Update**.

Rosters

To access rosters for a specific rota, navigate to **On-Call Scheduling > On-Call Calendars**. Right-click a rota and select **Edit rota** to open the Rota form. The **Rosters** related list contains the defined rosters, each of which identifies a subset of group members who participate in the on-call roster.

Open a roster to see the members. Initially, roster members are automatically populated from the **Group**, but you can remove users who will not participate in a rotation by clicking the **Edit** button on the **Members** related list. You cannot add members to a roster who are not in the group.



Note: Users can who have the `rota_admin` role can edit the related list.

If a roster's rotation should begin at a particular time of day, perhaps on-call responsibility transfers at 8 A.M. instead of midnight, clear the **All day rotation** check box so you can specify a start time.

Escalation Settings

- **Forced communication channel:** If Notify is active, you can specify a mandatory communication channel, either SMS or email. Keep in mind that if the on-call member does not have an SMS device, they are *not* contacted. No further communication attempts are made and the lack of an SMS device is logged.
- **# reminders:** The number of times ServiceNow sends reminders to a person who doesn't reply within the time frame defined in **Time between reminders**.
- **Time between reminders:** The time between the reminders being sent.

Values in these fields determine the value in the **Time before escalation** field. For example, if **# reminders** is 2 and **Time between reminders** is 10 minutes, then the **Time before escalation** is 30 minutes. That is the time that passes between the first notification of a specific person and the first notification of the next person if the first one does not reply to the notification or reminders.

Reminder Settings

Reminder settings can be defined for each individual roster. They enable configuration of sending reminders and the reminder lead time in days.

Triggering Rota Workflows

Enabling On-Call Notifications

To enable on-call notifications so that rota workflows have an effect, you must define trigger rules. Trigger rules determine the conditions that must be met before a notification is sent and what action must be taken. For more information, see Trigger Rules.

Defining Schedule Templates

Schedule templates are used to define schedule templates that can be used in the create new schedule wizard. For more information, see Using Schedules.

Managing On-Call Schedules



Note: This article applies to Fuji and earlier releases. For more current information, see *On-call Scheduling* ^[1] at <http://docs.servicenow.com> **The ServiceNow Wiki is no longer being updated. Visit <http://docs.servicenow.com> for the latest product documentation.**

Overview

After you create a rotation schedule, you can edit it directly from the calendar. This allows easy access to the rotation, especially for one-time changes. Users with the admin, rota_admin, or rota_manager role can edit schedule data. Only users with the admin or rota_admin role can delete schedule data.

Adjusting an Existing Shift

To adjust the times of an existing shift:

1. Navigate to **On-Call Scheduling > On-Call Calendars**.
2. Select the a **Group**.

The rotation schedules are shown for that group.

3. Double-click an existing shift.
4. Select an option:
 - **Specify extra times when a rota is active.** Select the **Rota** to change if multiple rotas are available.

If a span overlaps with another rotation schedule, an error is shown.

- **Schedule time off for a group member.** Select the **Member** you want to schedule time off for.

Time off is shown as a different color, and the member's name is followed by a time off notation. If you want to give a group member time off for more than one day, double-click to open the time off record you just created and set it to repeat, for example, daily until a specified date.

Note: When you specify time off for a group member, it only applies to the current group selected, starting with the Eureka release. If users are on multiple rotas, time off must be entered separately for each rota. In previous versions, time off records apply across all rotas.

1. Click **OK**.

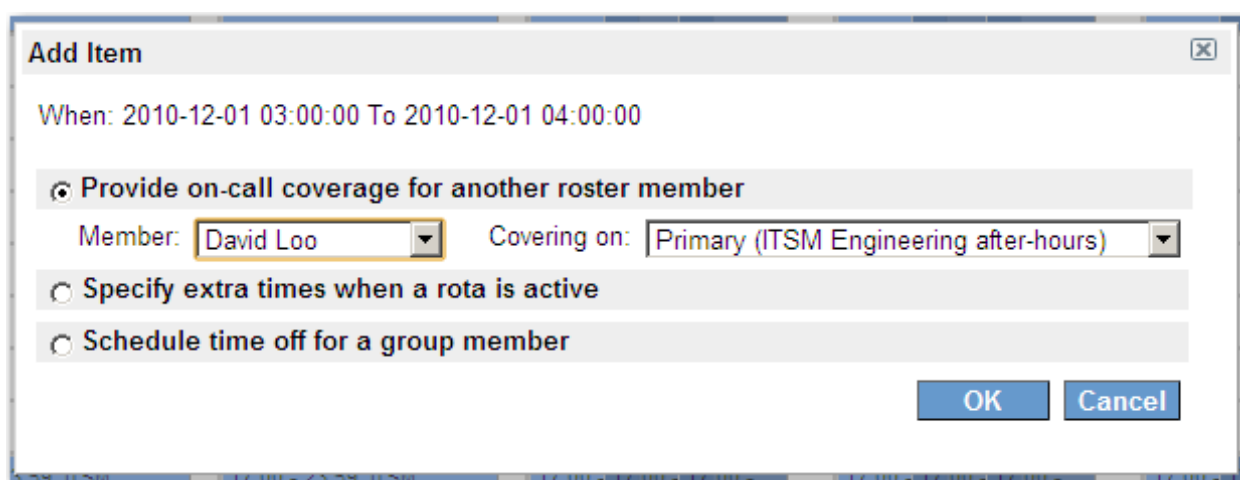
Substituting Shifts

To designate a substitute for a single shift:

1. Navigate to **On-Call Scheduling > On-Call Calendars**.
2. Select the a **Group**.

The rotation schedules are shown for that group.

3. Double-click the appropriate shift.
4. Select **Provide on-call coverage for another roster member**.



5. Select the **Member** scheduled to work the shift as a substitute.
6. In **Covering on**, select the desired roster or **All**.
7. Click **OK**.

The changed shift is shown in orange and the information for the roster schedule entry states the selected shift, for example, *Primary coverage*, or *Secondary coverage*. If you selected *All*, the member you selected covers for all rosters at that particular time and as many entries are made as there are rosters.

The final result looks like this:

Group: Service Desk

Wed, May 7

	Service Desk (24x7)	ITIL User (Secondary)	Beth Anglin (Tertiary)	Beth Anglin (Primary Coverage)	
00:00					
01:00					
02:00					
03:00					
04:00					
05:00					
06:00					
07:00					
08:00					
09:00					
10:00					
11:00					
12:00					
13:00					
14:00					
15:00					
16:00					
17:00					
18:00					
19:00					

Changing the Rota or Span for a Group

When creating or changing calendar entries manually via **On-Call Scheduling > On-Call Calendars**, enter the start time as a whole hour and the end time minus one second to prevent unintentional overlap with other entries, resulting in an incorrect on-call lineup. For example, a span from 16:00 to 24:00 P.M. should be entered as: 16:00:00 to 23:59:59.

To change the rota settings for a group:

1. Navigate to **On-Call Scheduling > On-Call Calendars**.
2. Right-click the appropriate shift.
3. Select one of the following:
 - **Edit rota:** change the schedule or related information.
 - **Edit span:** change the dates and frequency that the rota is active,
4. Make the changes and click **Submit**.

By clicking resend reminders on the Rota form, you can inform the members of the rota of the changes you have made.

Using Escalations in On-call Scheduling

Overview

Escalations provide a mechanism to ensure important issues are addressed in a timely manner within on-call scheduling. Escalations use a mechanism similar to SLAs to monitor response time and take time measurements. Take actions if these times are breached. The actions, like sending out an email or an SMS, are fired by trigger rules. Define trigger rules to determine the conditions under which specified actions are taken.

For example, a critical incident is raised for Acme Pharmaceuticals regarding a problem with their network access. An SMS notification is sent to James Jones, the third-line support engineer who is currently on-call for this type of incident. However, James is unavailable, and does not respond within the defined 30-minute response time.

Trigger rules defined for Acme Pharmaceuticals' critical incidents initiate an escalation after 30 minutes without a response. The person defined as the next point-of-contact is Ken Kramer, James' line manager, so an SMS notification is sent to Ken.

Escalation features are available starting with the Eureka release.

Users with the `rota_admin` role can configure escalation settings and define trigger rules.

Escalation Triggers

Escalation triggers define the conditions under which escalation actions occur. These actions can be defined with a workflow or server-side JavaScript.

When a task gets created or updated, the system compares the assignment rules with the trigger conditions, to see if any of the trigger conditions are matched. If a match is found, the system activates the associated workflow or script, which holds the escalation steps and actions.

For example, a new P1 incident is created and assigned to the **Software Group**. A trigger condition exists to state that if P1 incidents are created and assigned to this group, then an associated script or workflow should run.

Trigger Rules

Escalations use *trigger rules* to define conditions under which a *trigger action* is to be executed. A trigger action can be either a script or workflow. Trigger rules are an extension of assignment rules and are therefore run by the system. The behavior of assignment rules is used for trigger rules.

Trigger rules and trigger actions allow users to quickly set up escalation scenarios.



Note: Since trigger rules are a variation of assignment rules, they do not execute if the assignment is performed manually.

Example Escalation Scenario

Acme Pharmaceuticals needs to support a simple escalation process. When a critical or high incident is raised, a member of the Network group should be assigned to the incident based on the Network group's on-call schedule.

First, the trigger rule is defined with its conditions.

Trigger Rule - High Priority for Network

Name: High Priority for Network Order: 80

When to activate | What action to take

When to activate

Table: Incident [incident]

Match conditions: All

Conditions

All of these conditions must be met

Priority is one of: 1 - Critical, 2 - High, 3 - Moderate, 4 - Low

Category is: Network

Update Delete

Next, the escalation group and trigger action can be defined.

Trigger Rule - High Priority for Network

Name: High Priority for Network Order: 80

When to activate | What action to take

What action to take

* Group: Network

Trigger action: Workflow

* Trigger workflow: On-Call: Escalations by Email

Update Delete

The trigger action runs a custom workflow, On-Call: Escalations by Email, by which the Network group's current on-call resource automatically receives an email notification.

Creating Trigger Rules

To create a trigger rule :

1. Navigate to **On-Call Rotations > Escalations > Trigger Rules**.
2. Click **New**.
3. Fill in the fields, as appropriate (see table).

Trigger Rule

Name: Order: 100

When to activate | What action to take

When to activate

Table: Incident [incident]

Match conditions: All

Conditions

-- choose field -- -- oper -- -- value --

Submit

Trigger Rule

Submit

Name

Order100

When to activate

What action to take

What action to take

* Group

Trigger actionWorkflow

* Trigger workflow

Submit

4. Click **Submit**.

Field	Description
Name	The name of this trigger rule.
Order	The execution order of this trigger rule.
Table	A task table that applies to the trigger rule.
<div><div></div><div>Note: The list shows only tables and database views that are in the same scope as the trigger rule (starting with the Fuji release).</div></div>	
Match conditions	How the conditions should be applied. If you select All , all of the conditions have to be matched. If you select Any , it is sufficient if any one of the conditions is matched.
Conditions	The conditions which have to be met before the trigger rule executes.
Group	Select the user group to automatically assign the task to when this escalation occurs.
Trigger action	Select whether to run a Workflow or Script when the trigger conditions are met.
Trigger workflow	Select the workflow to execute. This field is available only if the Trigger action is set to Workflow .
Trigger script	The script to execute. This field is available only if the Trigger action is set to Script .

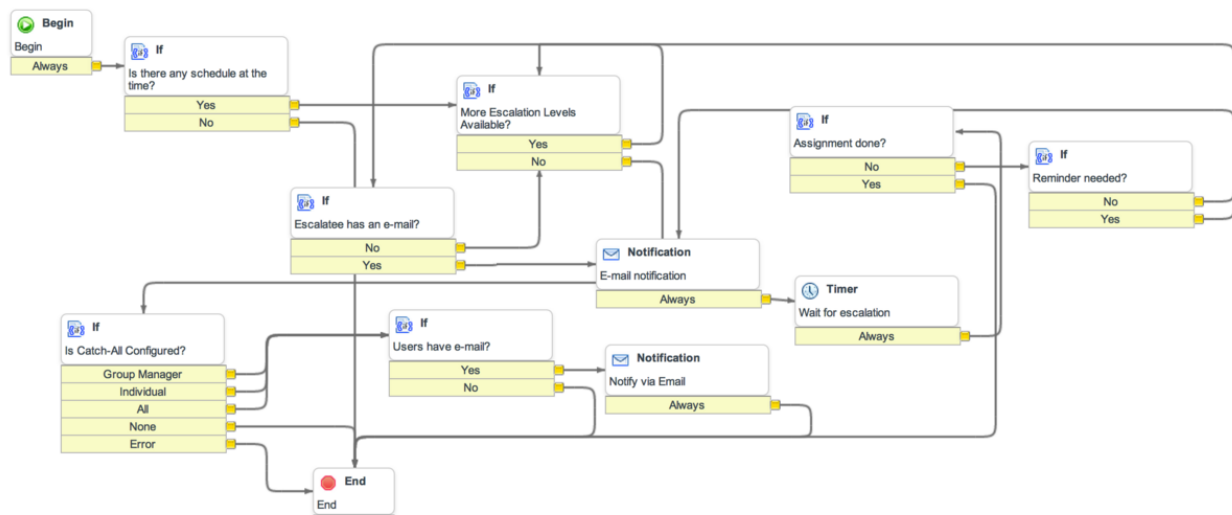
Note: Trigger rules will only fire if the `assigned_to` and `assignment_group` fields are not populated on a record.

On-Call: Escalations by Email Workflow

The workflow enables sending an email notification regarding a newly raised incident to the on-call members of a particular group. The workflow does not expect a response to the email notifications it sent, but instead checks the source incident record for changes in the `assigned_to` field. Depending on the value of the `assigned_to` field of the source record, the workflow branches or loops until the escalation chain is exhausted or the `assigned_to` field of the source incident is populated. If none of the users accepts assignment in time, the catch-all person is notified, if configured.

The workflow respects time-off as specified in the rosters. People who have time-off are not included in the escalation chain and no notifications are sent to them.

The workflow is intended to be used on a trigger rule based on the Incident table but other tables can be used as well. If you want to use a different table for this workflow, select the appropriate table, for example, Problem, in the **Trigger Workflow** field on the trigger rule form. This workflow is provided with on-call scheduling.



Escalation Chain

An escalation chain describes the order in which rosters and roster members receive escalation notifications. Depending on the number of rosters, the rota escalation type is one of the following:

- **Rotate through members:** the escalation chain goes through the member list of a specific roster (primary, secondary, tertiary) to determine who is to be notified.
- **Rotate through rosters:** the escalation chain goes through all the rosters to determine who is to be notified.

Depending on the escalation type you chose, the result can vary greatly. See Example 1: Rotate Through Rosters and Example 2: Rotate Through Members.

Example 1: Rotate Through Rosters

The escalation type on the rota is set to **Rotate through rosters**.

The escalations report shows the escalation chain for this case. To view the escalations report:

1. Navigate to **On-Call Scheduling > Escalations > Escalations Report**.
2. Select the **Date** for which you want to view the escalations report.
3. Select at least one **Group** for the report. In this case, Service Desk.
4. Select **For each group, show:** Active roster members.
5. Click **Run Report**.

The image shows the case in which reminders are defined for the **Primary**, **Secondary**, and **Tertiary** rosters. The members of the primary roster are notified first, then the members of the secondary, and so on for as many rosters as there are.

On-call Notification Report for 2014-01-16 12:51:51

On-call Notifications

Go to

Contact At

1

to 7 of 7

All

	Group	Type	Contact At	User	Device type	Device	Delay	Primary user	Roster	Rota
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 12:51:51	Beth Anglin			0 Seconds	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:01:51	Beth Anglin			10 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:11:51	Beth Anglin			20 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:21:51	David Loo			30 Minutes	Beth Anglin	Secondary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:26:51	David Loo			35 Minutes	Beth Anglin	Secondary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:31:51	ITIL User			40 Minutes	Beth Anglin	Tertiary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	Notify Manager	2014-01-16 13:36:51	Beth Anglin			45 Minutes	Beth Anglin		Service Desk (24x7)

Actions on selected rows...

1

to 7 of 7

For this example, users can see which rotas they are part of in the **My Schedule Report** module. Users who are not the first on-call person are displayed as well. This enables the user to view the rota from a personal perspective, which is the preferred method for most users.

Example 2: Rotate Through Members

The escalation type on the rota is set to **Rotate through members**.

The escalations report shows the escalation chain for this case. The image shows the case in which there is only a **Primary roster** with two reminders.

On-call Notification Report for 2014-01-16 12:49:19

On-call Notifications Go to Contact At

1 to 10 of 10

All

	Group	Type	Contact At	User	Device type	Device	Delay	Primary user	Roster	Rota
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 12:49:19	Beth Anglin			0 Seconds	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 12:59:19	Beth Anglin			10 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:09:19	Beth Anglin			20 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:19:19	David Loo			30 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:29:19	David Loo			40 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:39:19	David Loo			50 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:49:19	ITIL User			1 Hour	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 13:59:19	ITIL User			1 Hour 10 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	On-call Person	2014-01-16 14:09:19	ITIL User			1 Hour 20 Minutes	Beth Anglin	Primary	Service Desk (24x7)
<input type="checkbox"/>	Service Desk	Notify Manager	2014-01-16 14:19:19	Beth Anglin			1 Hour 30 Minutes	Beth Anglin		Service Desk (24x7)

Actions on selected rows...

1 to 10 of 10

For this example, users who are not the first on-call person do *not* see themselves in the **My Schedule Report** module. This is caused by the **Rotate through members** logic: everybody on a rota is *always* on the escalation chain, which diminishes the value of viewing the rota from a personal perspective.

Using Notify with On-Call Scheduling



Note: This article applies to Fuji and earlier releases. For more current information, see [Use Notify with On-Call Scheduling](#)^[1] at <http://docs.servicenow.com> **The ServiceNow Wiki is no longer being updated. Visit <http://docs.servicenow.com> for the latest product documentation.**

Overview

Within on-call scheduling, you can use Notify functions to send an SMS or voice mail to on-call resources when an incident gets assigned to them. A mobile number is required in their user record. Beware that some phone numbers have only voice mail capabilities.

Notify is available as a separate subscription from the ServiceNow platform. To purchase a subscription, contact your ServiceNow account manager.

On-Call: Assign by Acknowledgement Workflow

The On-Call: Assign by Acknowledgement workflow is provided with Notify. The workflow uses data from the escalation settings of rotas and rosters. Depending on these settings, the workflow iterates through the defined escalation chain and sends notifications by SMS or email to users asking them for incident assignment.

If **Force communication channel** is specified in the **Escalation settings** for rosters, the preferred user device is used, either SMS or email. If the preferred device is SMS, and the on-call member does not have an SMS device defined, the user is *not* contacted even if the user has an email address. When forcing a communication channel on an escalation level does not succeed, no further communication attempts are made. The fact that the user could not be reached is logged in the log files. The setting **Force communication channel** is only available if Notify is installed. To change the setting, navigate to **On-Call Scheduling > My Group Schedules** and choose a rota. Open the rota and choose one of the rosters from the related list.

The workflow respects time-off as specified in the rosters. People who have time-off are not included in the escalation chain and no notifications are sent to them.

Before you can send notifications, you must define trigger rules. Trigger rules determine the conditions that must be met before a notification is sent and what action must be taken. Keep in mind that trigger rules supersede some of the on-call business rules in previous versions.



Note: *If you have customized on-call business rules in previous versions, you need to deactivate these business rules before you can work with trigger rules.*

To use the On-Call: Assign by Acknowledgement workflow, create a new rota and define a new trigger rule which is set for the same **Group** as the rota. Configure the trigger rule to trigger the workflow.

References

- [1] https://docs.servicenow.com/bundle/jakarta-it-service-management/page/administer/user-administration/concept/c_UseNotifyWithOnCallScheduling.html

On-Call Scheduling API

Overview

The on-call scheduling API provides functionality for managing on-call schedules.

Where to Use

Use this when you want to use on-call scheduling functionality with applications on your system.

Method Summary

Method Summary	Description
<code>spansOverlap(parent, child, timeZone)</code>	Checks if there is overlap in time between the parent spans and the child spans.
<code>getEscalateeAt(groupId, dateTime, position)</code>	Gets an item to escalate to, either a user [<code>sys_user</code>] or notification device [<code>cmn_notif_device</code>], for a group's rota at the specified date and time and at a certain position in the escalation lineup.
<code>getEscalationPlan(groupId, dateTime)</code>	Gets a list of objects to escalate to, escalation plans that consists of either a user [<code>sys_user</code>] or notification device [<code>cmn_notif_device</code>], for a group's rota at the specified date and time.
<code>getEscalationType(rotaID)</code>	Gets the type of escalation based on a simple calculation.
<code>getCatchAllType(rotaID)</code>	Gets the type of <code>_catch_all_</code> that lives at the end of the escalation chain. Whenever the escalation chain finishes without any on-call person having been assigned, the <code>_catch_all_</code> will be the final person the incident is assigned to (if configured).
<code>getCatchAll(rotaID)</code>	Gets the <code>sys_id</code> of the catch all person. Use together with <code>_getCatchAllType_</code> to determine the source of the returned id. Gets the <code>sys_id</code> of the catch all persons.

Method Detail

`spansOverlap(parent, child, timeZone)`

Checks if there is overlap in time between the parent spans and the child spans.

Input Parameters

Parameter	Type	Description	Optional
<code>parent</code>	<code>ArrayList</code>	The parent spans to compare with.	No
<code>child</code>	<code>ArrayList</code>	The child spans to check for overlap.	No
<code>timeZone</code>	<code>String</code>	The time zone.	No

Returns

boolean: whether or not there is overlap between parent and child spans.

Examples

Example 1:

```
var onCall = new SNC.OnCallRotation();

// get a time range we are interested in
var timeZone = gs.getSession().getTimeZoneName();
var dateStart = new GlideDateTime();
var dateEnd = new GlideDateTime().addMonths(1);

// convert glidedatetime to scheduledatetime because it is required
// by the function being called below
var scheduleStart = new GlideScheduleDateTime(dateStart);
var scheduleEnd = new GlideScheduleDateTime(dateEnd);
scheduleStart.setTimeZone(timeZone);
scheduleEnd.setTimeZone(timeZone);

// calculate rotation items based on the date and time given
// for all the groups the currently logged in user is a member of
gs.include("OnCallRotationPersonal");
var rotation = new OnCallRotationPersonal();
var myGroups = gs.getUser().getMyGroups();
var groupIter = myGroups.iterator();

while(groupIter.hasNext()){
    var rotaItems = rotation.onCallDuringPeriod(groupIter.next(),
scheduleStart, scheduleEnd);

    // loop through rotation schedules
    for (var i = 0; i < rotaItems.length - 1; i++) {
        var parentItem = rotaItems[i];
        var nextItem = rotaItems[i + 1];

        // check if previous and next time spans overlap
        var overlaps =
onCall.spansOverlap(parentItem.getTimeSpans(), nextItem.getTimeSpans(),

                        gs.getSession().getTimeZoneName());
    }
}
```

getEscalateeAt(groupId, dateTime, position)

Gets an item to escalate to, either a user [sys_user] or notification device [cmn_notif_device], for a group's rota at the specified date and time and at a certain position in the escalation lineup.

The function returns NULL if an invalid position or group is passed as an argument.



Note: You can use the `getTableNames()` function to check whether the returning `GlideRecord` comes from the `sys_user` or `cmn_notif_device` table.

Input Parameters

Parameter	Type	Description	Optional
groupId	String	The <code>sys_id</code> for the group to get the item to escalate to from.	No
dateTime	GlideDateTime	The date and time where the escalation lineup should begin.	No
position	int	The position in the lineup to determine the item to escalate to (1-based, which means the count starts with 1).	No

Returns

GlideRecord: for the item to escalate to or null if nothing found.

Examples

Example 1:

```
var oncall = new SNC.OnCallRotation();
var escalatee =
oncall.getEscalateeAt("287ebd7da9fe198100f92cc8d1d2154e",
    new GlideDateTime("2013-11-26 09:00:00"), 2);

if (escalatee) {
    gs.print(escalatee.getTableNames());
    gs.print(escalatee.getTableNames());
}
```

getEscalationPlan(groupId, dateTime)

Gets a list of objects to escalate to, escalation plans that consist of either a user [sys_user] or notification device [cmn_notif_device], for a group's rota at the specified date and time.

The Escalation object contains the following fields:

- int order: the escalation order within the lineup
- String userId: sys_id of the sys_user record or null
- String deviceId: sys_id of the cmn_notif_device record or null
- boolean isDevice: true or false depending on whether the item to escalate to is a device or user
- GlideDuration timeBetweenReminders: the time between reminders being sent
- int reminderNum: number of reminders to be sent for each item to escalate to

Input Parameters

Parameter	Type	Description	Optional
groupId	String	The <code>sys_id</code> for the group to get the to escalate to from.	No
dateTime	GlideDateTime	The date and time when the escalation lineup should begin.	No

Returns

List<Escalatee>: a list of objects to escalate to.

Examples

Example 1:

```
var rota = new SNC.OnCallRotation()
var gdt = new GlideDateTime();
gdt.addMonths(1); //Next month

var escalationPlan =
rota.getEscalationPlan("486ae95aeb201100fcfb858ad106fe40", gdt);

for(var i = 0; i < escalationPlan.size(); i++){
    gs.log(escalationPlan.get(i).order + " " +
escalationPlan.get(i).userId + " " +
        escalationPlan.get(i).deviceId + " " +
escalationPlan.get(i).timeBetweenReminders + " " +
        escalationPlan.get(i).reminderNum );
}
```

getEscalationType(rotaID)

Gets the type of escalation based on a simple calculation. If there is one active roster in the rota, rotate through members. If there is more than one active roster in the rota, rotate through rosters.

Input Parameters

Parameter	Type	Description	Optional
rotaID	String	The <code>sys_id</code> for the rota to check for rosters.	No

Returns

- Member: if there is one roster in the rota.
- Roster: if there is more than one roster in the rota.
- No rosters in this rota: if none of the above.

Examples

Example 1:

```
var rota = new SNC.OnCallRotation() //contains one roster

gs.log(rota.getEscalationType("486ae95aeb201100fcfb858ad106fe40")); //
logs 'member'
```

Gets a list of objects to escalate to (escalation plan) (consisting of either a user [sys_user] or notification device [cmn_notif_device]) for a group's rota, at the specified date and time.

```
}
```

getCatchAllType(rotaID)

Gets the type of `_catch all_` that lives at the end of the escalation chain. Whenever the escalation chain finishes without any on-call person having been assigned, the `_catch all_` is the final person the incident is assigned to, if configured.

Input Parameters

Parameter	Type	Description	Optional
rotaID	String	The sys_id of the rota.	No

Returns

- Null: invalid rota id or catch all is not available.
- Group_manager: the manager of the group linked to the rota is the catch all person.
- Individual: a configured user is the catch all person.
- All: all members of the configured roster are the catch all person.

Examples

Example 1:

```
var rotaID = "...";
var rota = new SNC.OnCallRotation()
gs.log("catch all: " + rota.catchAll(rotaID) + " (type:" +
rota.catchAllType(rotaID) + ")");
}
```


getCatchAll(rotaID)

Gets the `sys_id` of the catch all person. Use together with `_getCatchAllType_` to determine the source of the returned id. Get the `sys_id` of the catch all persons.

Input Parameters

Parameter	Type	Description	Optional
rotaID	String	The <code>sys_id</code> of the rota.	No

Returns

String: containing the `sys_id` of a `sys_user`, a `cmn_rota_roster` (or null).

Examples

. Example 1:

```
var rotaID = "...";
var rota = new SNC.OnCallRotation()
gs.log("catch all: " + rota.catchAll(rotaID) + " (type:" +
rota.catchAllType(rotaID) + ")");
}
```

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