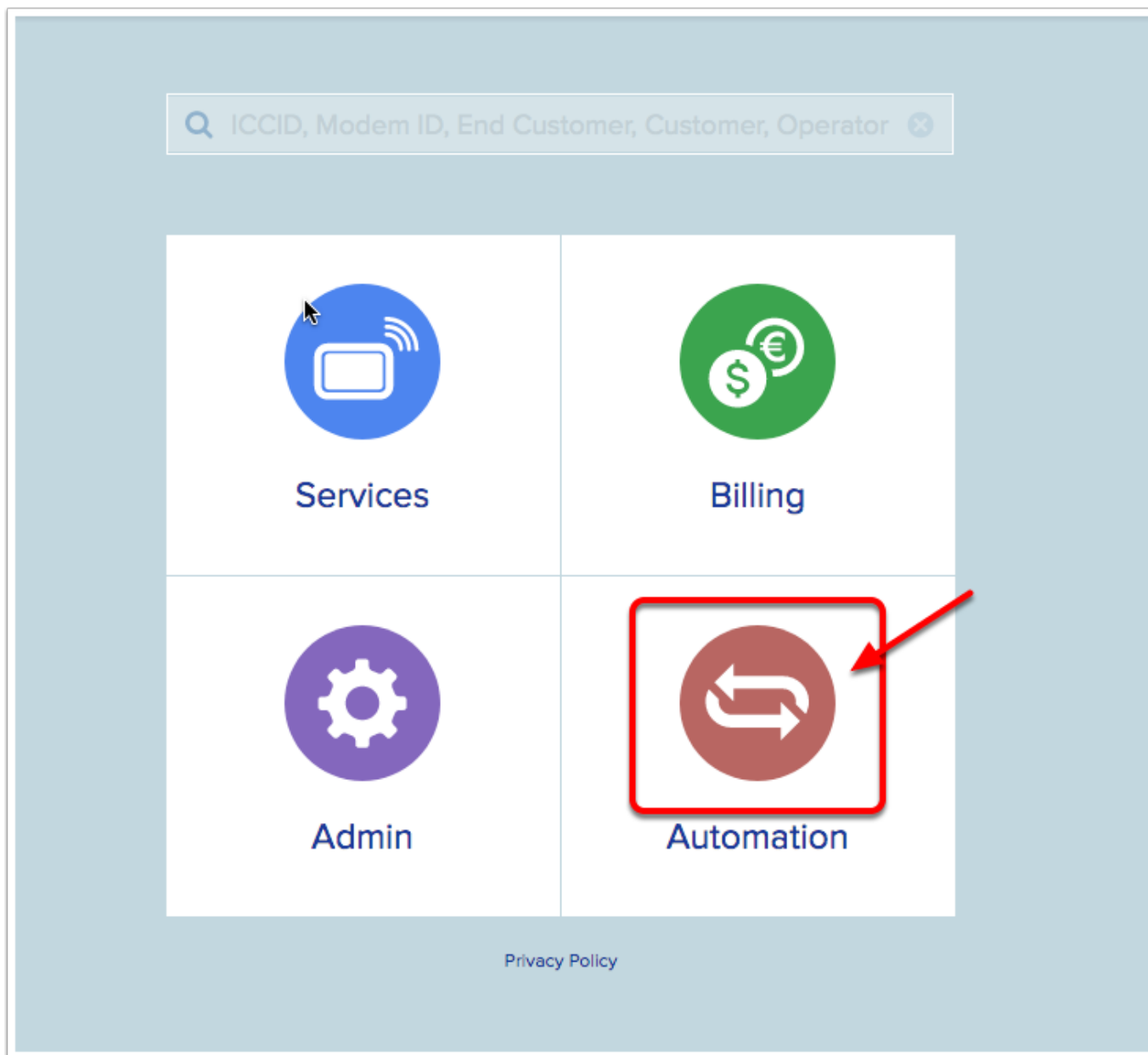


This document is designed to show M2M One customers how to manage, configure and monitor Automation rules for your M2M One SIM Card fleet.

Accessing the Automation Section

When you first log into the M2M One Control Centre click on the Automation button to take you to the Automation tab to view & configure automation rules.

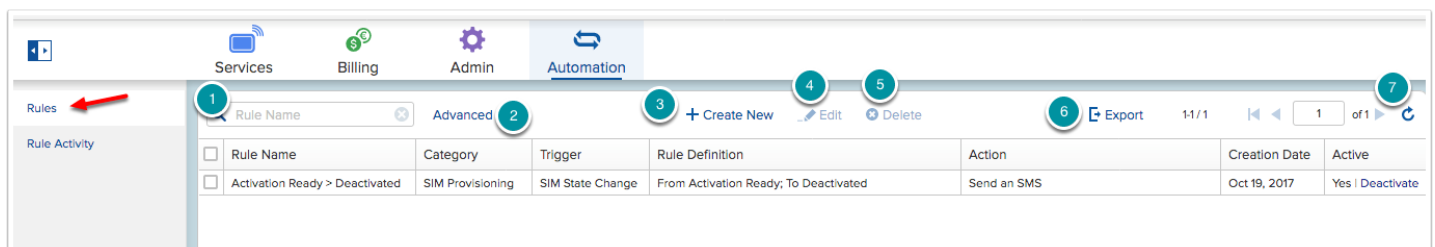


Automation - Rules Page

When you click on the Automation button by default you will be taken to the Rule page - This page shows you all the current rules associated with your Control Centre account.

1. **Search Bar** - You can use this bar to search your rules list (this search accepts * wildcard searches)
2. **Advanced** - This filter allows you to add filters to your search to narrow down your results
3. **+ Create New** - This button allows you to create new rules
4. **Edit** - When a rule is selected press this button to edit the selected rule
5. **Delete** - When a rule is selected press this button to delete the selected rule
6. **Export** - Clicking this button will export the currently displayed list to an Excel spreadsheet
7. **Refresh** - Clicking the refresh icon will refresh the current list of rules

Tip: As with any section in Control Centre you can right-click on the column headings to show or hide additional information to make the page easy to navigate



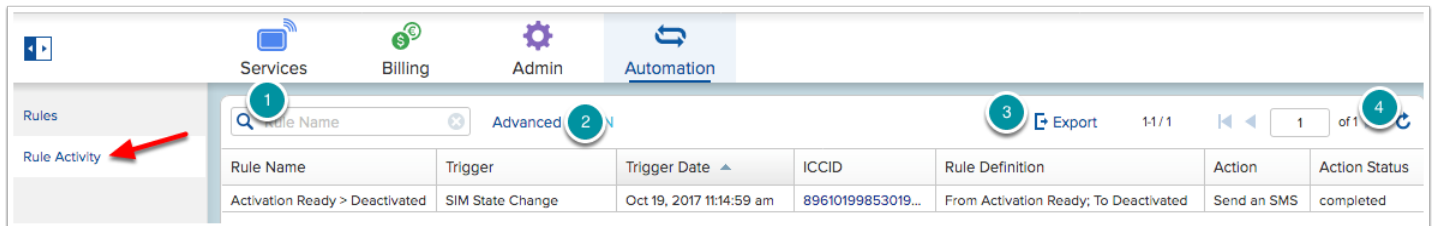
Rule Name	Category	Trigger	Rule Definition	Action	Creation Date	Active
Activation Ready > Deactivated	SIM Provisioning	SIM State Change	From Activation Ready; To Deactivated	Send an SMS	Oct 19, 2017	Yes Deactivate

Automation - Rule Activity Page

Clicking on the Rule Activity option in the navigation tab to the left will take you to the Rule Activity page. This page will show you all the rules that have been actioned on your Control Centre account along with a Trigger Date, ICCID effected and a description of the rule.

This page is great for checking if your rules are working as intended or as an audit trail to debug any unintended effects from your rules.

1. **Search Bar** - You can use this bar to search your rules list (this search accepts * wildcard searches)
2. **Advanced** - This filter allows you to add filters to your search to narrow down your results
3. **Export** - Clicking this button will export the currently displayed list to an Excel spreadsheet
4. **Refresh** - Clicking the refresh icon will refresh the current list of rules



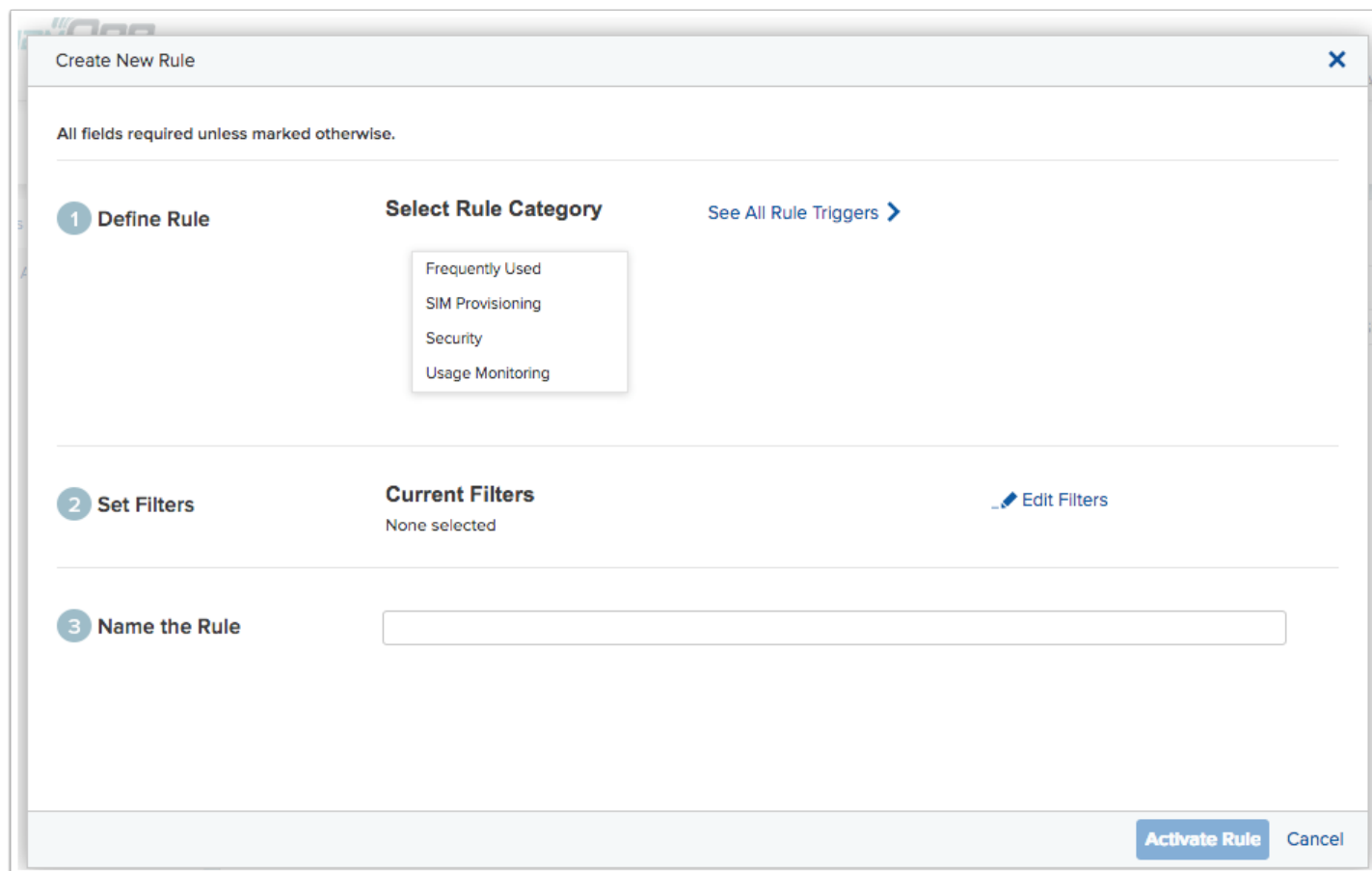
Rule Name	Trigger	Trigger Date	ICCID	Rule Definition	Action	Action Status
Activation Ready > Deactivated	SIM State Change	Oct 19, 2017 11:14:59 am	89610199853019...	From Activation Ready; To Deactivated	Send an SMS	completed

Creating Automation Rules

To create new automation rules for your account simply click the '+ **Create New**' button from the Rules page - When you click that button you should see the pop-up below.

Rules are created in 3 Steps:

1. **Define** - Select the criteria you want to trigger the rule and then what action you want to be taken. Categories can be selected using the pre-set headings or you can view a list of all available rules by clicking **See All Rule Triggers >**
2. **Filter** - Restrict the rule to only affect certain services
3. **Name** - Once you've created a rule give it a name thats easy to identify and locate in your rules & rules activity listing



The screenshot shows a 'Create New Rule' dialog box with a close button (X) in the top right corner. Below the title bar, it states 'All fields required unless marked otherwise.' The form is divided into three steps:

- 1 Define Rule**: This section includes a 'Select Rule Category' dropdown menu with options: 'Frequently Used', 'SIM Provisioning', 'Security', and 'Usage Monitoring'. To the right of the dropdown is a link 'See All Rule Triggers >'.
- 2 Set Filters**: This section includes a 'Current Filters' label with the text 'None selected' below it. To the right is a link 'Edit Filters' with a pencil icon.
- 3 Name the Rule**: This section features a single text input field for naming the rule.

At the bottom right of the dialog, there are two buttons: 'Activate Rule' (in blue) and 'Cancel'.

Rules available to M2M One Customers

Clicking on **See All Rule Triggers** > launches a pop-up showing all available rules to M2M One customers:

1. **SIM State Change** - Used to trigger a rule when a SIM moves between 'States' e.g. Activated to Deactivated, Test Ready to Activated, etc
2. **SIM Custom Field Change** - Used to trigger a rule when information is entered or removed from a Custom Field in Control Centre
3. **IMEI Change** - Used to trigger a rule when a device changes IMEI e.g. a SIM is removed from its initial device and inserted into a new device
4. **Too many connections (Cycle to Date)** - Used to trigger a rule when a SIM is displaying strange connection behaviour e.g disconnecting and reconnecting repeatedly.
5. **Number of Session Connections (24 hours)** - Used to trigger a rule when a SIM exceeds or is underneath a set number of session connections
6. **Cycle To Date Data Usage** - Used to trigger a rule when a SIM exceeds a specific amount of data in a current billing cycle
7. **Monthly Pooled Data Usage** - *This rule does not work with the M2M One Control Centre and is due to be removed, please don't create rules with this trigger - To Monitor Pooled Data Usage with M2M One SIMs please email support@m2mone.com.au and ask for your email to be added to the daily pooled data digest email*
8. **Recent Data Usage (24 hours)** - Used to trigger a rule when a SIM exceeds a specific amount of data in a 24 hour period
9. **Recent SMS Usage** - Used to trigger a rule when a SIM exceeds a specific amount of SMS messages in either a 24 hour period or billing cycle
10. **Monthly Pooled SMS Usage** - *This rule does not work with the M2M One Control Centre and is due to be removed, please don't create rules with this trigger*
11. **Cycle to Date Voice Usage** - Used to trigger a rule when a SIM exceeds a specific amount of voice usage in a current billing cycle
12. **Recent Voice Usage (24 hours)** - Used to trigger a rule when a SIM exceeds a specific amount of voice usage in a 24 hour period

Rule Triggers List ✕

SIM Provisioning

SIM State Change 1
Triggered when a SIM state changes

SIM Custom Field Change 2
Triggered when there is a change to one of the custom fields on a SIM

Security

IMEI Change 3
Triggered when the network detects a change in the device IMEI

Usage Monitoring

Too many connections (Cycle to Date) 4
Triggered when a SIM has more connections than expected in the current billing cycle

Number of Session Connections (24 hours) 5
Triggered when a SIM has more/fewer connections than expected in the trailing 24 hours

Cycle To Date Data Usage 6
Triggered when a SIM's cycle to date data usage is above the specified threshold

Monthly Pooled Data Usage 7
Triggered per account per zone when data usage for the zone is over the limit for the pooled plans

Recent Data Usage (24 hours) 8
Triggered per SIM when usage is over limit in the trailing 24 hours

Recent SMS Usage 9
Triggered when a SIM exceeds expected SMS usage

Monthly Pooled SMS Usage 10
Triggered per account per zone when SMS usage for the zone is over the limit for the pooled plans

Cycle To Date Voice Usage 11
Triggered when a SIM's cycle to date voice usage is above the specified threshold

Recent Voice Usage (24 hours) 12
Triggered when a SIM's daily voice usage is above the specified threshold

1. SIM State Change

The SIM State Change rule is used to monitor SIMs changing status - This could be used to monitor when a SIM activates or if a SIM is turned off for example.

1. The SIM states available here are Test Ready | Activation Ready | Activated | Deactivated
2. The response options here are Send an Email | Send an SMS to the device | Push an API Message
3. Selecting email or SMS will give you the option to compose a message - Each composer has a variety of variables you can add to them body of the text by clicking on them. Emails can be send to multiple recipients by using a comma to seperate addresses.
4. Filters are not available on this rule
5. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Note: *The Send an SMS option will send an SMS to the SIM card, it is not designed for SMSing another mobile service*

Create New Rule ✕

1 Define Rule [← Show Rule Trigger Selections](#)

Current Selections:

Category SIM Provisioning

Trigger SIM State Change

When this happens...

1 If any SIM changes SIM State from to

Do this...

2 Then to recipient(s)

Compose message to recipient(s)

3

ICCID	MSISDN	AccountName	AccountCreationDate	RatePlanName	CustomerName	FromSimState	ToSimState
Type your message below using the above variables. Click them to insert at the current character position.							
<input type="text" value="SIM ICCID has recently moved from FromSimState to ToSimState"/>							

2 Set Filters **4 Current Filters** [Edit Filters](#)

None selected

3 Name the Rule **5**

Activate Rule [Cancel](#)

2. SIM Custom Field Change

This rule is used only to push information from the Control Centre API to your platform of choice when a Custom Field is changed in Control Centre

1. This is the only option available
2. The response options here are Push an API Message - With pushing an API message you need to input the URL of your platform
3. Filters are not available on this rule
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Create New Rule ✕

All fields required unless marked otherwise.

1 Define Rule Current Selections: Show Rule Trigger Selections

Category SIM Provisioning

Trigger SIM Custom Field Change

When this happens...

1 If any SIM experiences a change in one of the custom fields

Do this...

2 Then Push an API message to URL:

2 Set Filters **3 Current Filters** None selected Edit Filters

3 Name the Rule **4**

Activate Rule **Cancel**

3. IMEI Change

This is a SIM security rule designed to be triggered when the IMEI of the device the SIM is inserted into has changed - This can be used to stop SIMs being used in unauthorised devices.

1. The response options here are Send an Email | Send an SMS to the device | Push an API Message | Change the device's SIM status
2. Selecting Change the device's SIM status gives you the option to enact a state change when the IMEI change, for example deactivate the SIM - You can trigger a follow-up action a set period after this event, for example reactivate the SIM a day later.
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Create New Rule ✕

All fields required unless marked otherwise.

1 Define Rule [← Show Rule Trigger Selections](#)

Current Selections:

Category	Security
Trigger	IMEI Change

When this happens...

1 If the network detects a change in the device IMEI

Do this...

2 Then to

Follow Up with

And take this follow-up action:

At this time:

2 Set Filters **3 Current Filters** [Edit Filters](#)

None selected

3 Name the Rule **4**

Activate Rule [Cancel](#)

4. Too many connections (Cycle to Date)

This is a SIM rule designed to be triggered when a SIM card has too many connections in the current billing month - This is useful to identify strange or faulty behaviour early, if a SIM is constantly trying to reconnect and causing network issues the carrier may blacklist the service.

1. Here you can set the number of connections within a billing cycle
2. Selecting Change the device's SIM status gives you the option to enact a state change when the threshold is reached , for example deactivate the SIM - You can trigger a follow-up action a set period after this event, for example reactivate at the start of the new billing cycle.
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Create New Rule ✕

1 Define Rule Current Selections: [Show Rule Trigger Selections](#)

Category Usage Monitoring

Trigger Too many connections (Cycle to Date)

When this happens...

1 If any SIM has established more than connections in the current cycle

2 Do this...

Then to

Follow Up with

And take this follow-up action:

At this time:

2 Set Filters **3 Current Filters** [Edit Filters](#)

None selected

3 Name the Rule **4**

5. Number of Session Connections (24 hours)

This function is the same as '**4. Too many connections (Cycle to Date)**' but can be triggered if a SIM is under or over a certain number of connections - For example if a SIM hasn't connected in 24 hours you may want an email notification to let you know

1. Here you can set the number of connections within a 24 hour period
2. Selecting Change the device's SIM status gives you the option to enact a state change when the threshold is reached , for example deactivate the SIM - You can trigger a follow-up action a set period after this event, for example reactivate at the start of the new billing cycle.
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Create New Rule ✕

All fields required unless marked otherwise.

1 Define Rule [← Show Rule Trigger Selections](#)

Current Selections:

Category: Usage Monitoring

Trigger: Number of Session Connections (24 hours)

When this happens...

1 If any SIM has established ▼ 5 ▼ connections in a 24 hour period

- more than
- less than

Do this...

2 Then Change the device's SIM status ▼ to Deactivated ▼

Follow Up with

2 Set Filters **3 Current Filters** [✎ Edit Filters](#)

None selected

3 Name the Rule **4**

Activate Rule Cancel

6. Cycle To Date Data Usage

This is a usage management rule designed to identify a single SIM that is using more than a specified amount of data in the current billing month - For an example if your device is only supposed to use 500KB in a month and it uses 2MB then alert.

1. Here you can set the data usage to trigger the alert (Usage is in KB) - there are two options here but since M2M One do not supply pre-paid SIM cards only **'exceeds a specified data limit of'** will work.
2. The response options here are Send an Email | Send an SMS to the device | Push an API Message | Change the device's SIM status | Send an email to the end consumer
3. The example used here is **'Send an email to the end consumer'** you can compose an email which will be sent to the person listed under the **End Consumer Email** against the SIM Card
4. Filters available are on SIM State | Custom Fields
5. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Tip: *You can stack data rules to take progressive actions, for example if a SIM uses 2MB send an email but if it uses over 5MB change the status to Deactivated*

Create New Rule

1 Define Rule

Current Selections:

Category Usage Monitoring

Trigger Cycle To Date Data Usage

[Show Rule Trigger Selections](#)

When this happens...

1 If any SIM exceeds a specified data limit of 2048 KB in the current cycle

Do this...

2 Then Send an email to the end consumer

Compose message to recipient(s)

3

ICCID AccountName RatePlanName CustomerName SimState CycleToDateDataUsage DeviceID IMEI

Type your message below using the above variables. Click them to insert at the current character position.

2 Set Filters

4 Current Filters

None selected [Edit Filters](#)

3 Name the Rule

5

[Activate Rule](#) [Cancel](#)

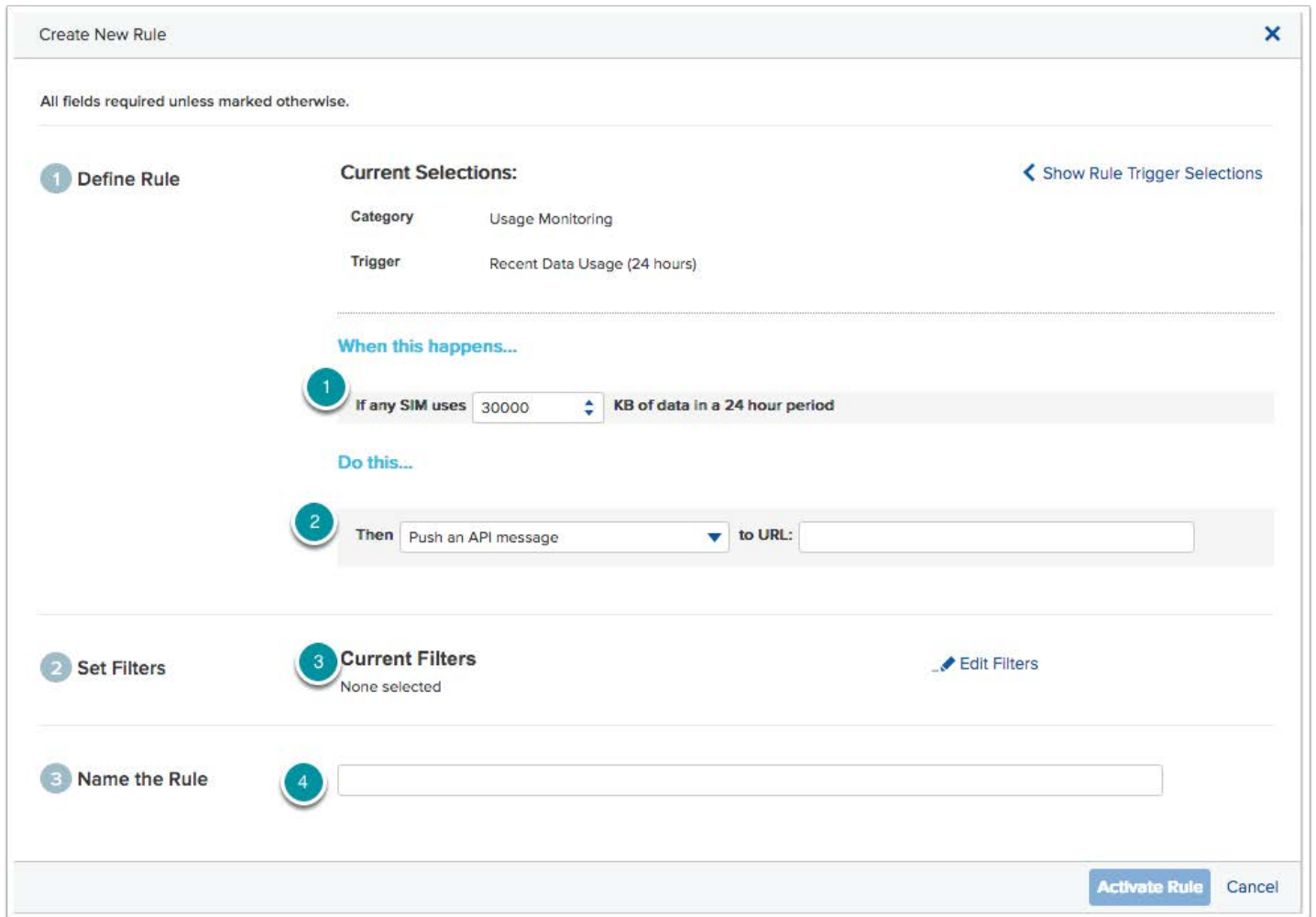
7. Recent Data Usage (24 hours)

This is a usage management rule designed to identify a single SIM that is using more than a specified amount of data in a 24 hour period - For an example if your device is only supposed to use 3MB in a month and it uses 30MB then alert.

1. Here you can set the data usage to trigger the alert (Usage is in KB)
2. The response options here are Send an Email | Send an SMS to the device | Push an API Message | Change the device's SIM status
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Tip: You can stack data rules to take progressive actions, for example if a SIM uses 2MB send an email but if it uses over 5MB change the status to Deactivated



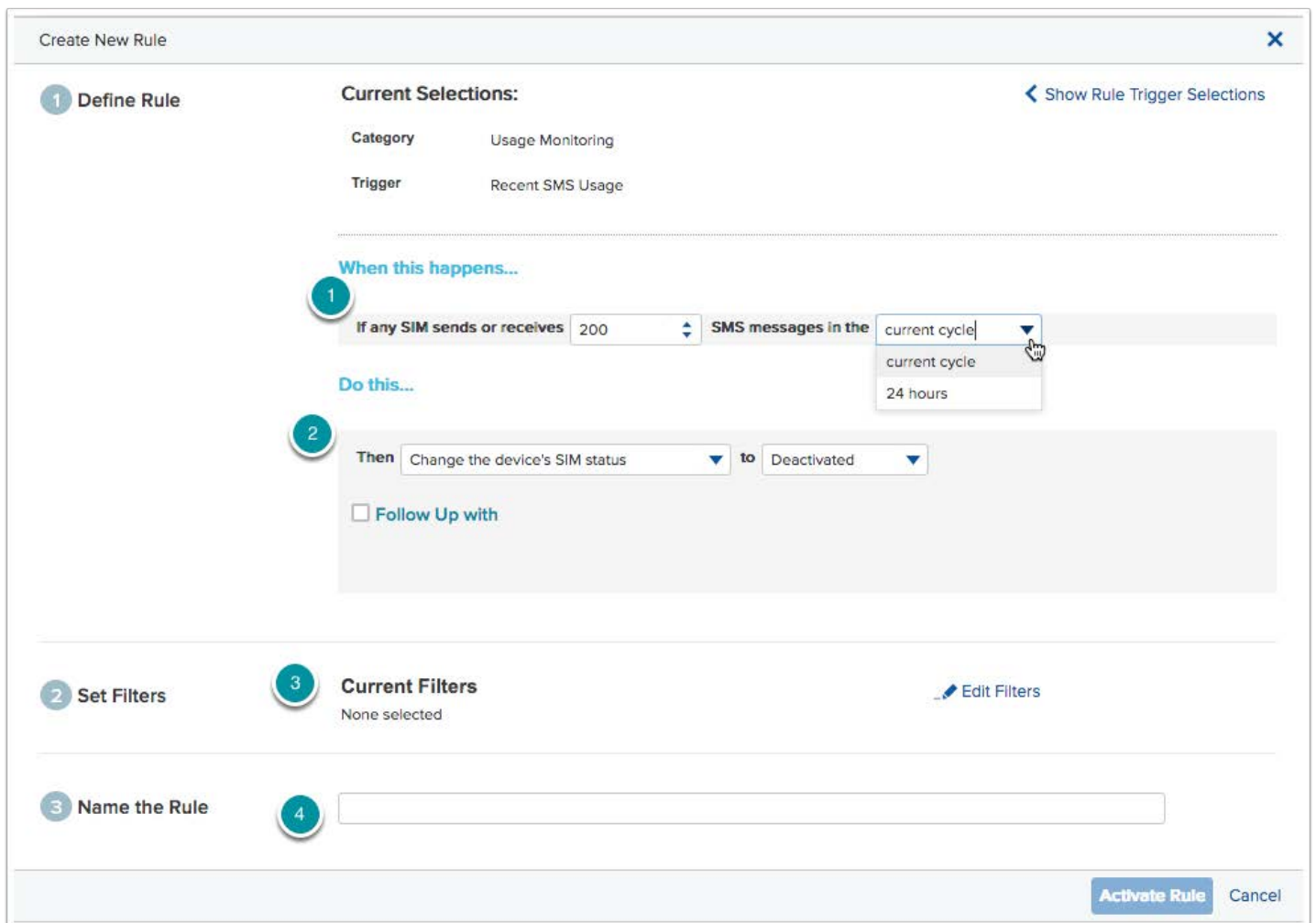
8. Recent SMS Usage

This is a usage management rule designed to identify a single SIM that is using more than a specified amount of SMS in a 24 hour period or billing cycle - For an example if your device is only supposed to use 100 SMS in a month and it uses 200 SMS then alert.

1. Here you can set the SMS usage to trigger the alert (Usage is combined SMS MO & MT) and the period either 24 hours or current billing cycle
2. The response options here are Send an Email | Send an email to the end consumer | Push an API Message | Change the device's SIM status
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Tip: You can stack SMS rules to take progressive actions, for example if a SIM uses 200 SMS send an email but if it uses over 500 SMS change the status to Deactivated



The screenshot shows the 'Create New Rule' interface with the following details:

- 1 Define Rule** (Current Selections):
 - Category: Usage Monitoring
 - Trigger: Recent SMS Usage
- When this happens...** (Step 1):
 - Trigger: If any SIM sends or receives 200 SMS messages in the current cycle (dropdown menu is open showing 'current cycle' and '24 hours').
- Do this...** (Step 2):
 - Action: Then Change the device's SIM status to Deactivated.
 - Follow Up with:
- 2 Set Filters** (Step 3):
 - Current Filters: None selected (Edit Filters button available).
- 3 Name the Rule** (Step 4):
 - Input field for naming the rule.
- Buttons:** Activate Rule, Cancel

9. Cycle to Date Voice Usage

This is a usage management rule designed to identify a single SIM that is using more than a specified amount of Voice in a billing cycle - For an example if your device is only supposed to use 1 Minute of Voice in a month and it uses 2 Minutes then alert.

1. Here you can set the Voice usage to trigger the alert (Usage is in minutes) and the type either MO, MT or both
2. The response options here are Send an Email | Send an email to the end consumer | Push an API Message | Change the device's SIM status | Send an SMS to the device
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Tip: *You can stack Voice rules to take progressive actions, for example if a SIM uses 2 Minutes of Voice MO send an email but if it uses over 5 Minutes of Voice MO change the status to Deactivated*

Create New Rule ✕

All fields required unless marked otherwise.

1 Define Rule [← Show Rule Trigger Selections](#)

Current Selections:

Category Usage Monitoring

Trigger Cycle To Date Voice Usage

When this happens...

If any SIM exceeds minute(s) of voice in the current cycle

Do this...

Then to

Follow Up with

2 Set Filters [Edit Filters](#)

Current Filters
None selected

3 Name the Rule

Activate Rule [Cancel](#)

10. Recent Voice Usage (24 hours)

This is a usage management rule designed to identify a single SIM that is using more than a specified amount of Voice in a 24 hour period - For an example if your device is only supposed to use 1 Minute of Voice in a month and it uses 10 Minutes then alert.

1. Here you can set the Voice usage to trigger the alert (Usage is in minutes) and the type either MO, MT or both
2. The response options here are Send an Email | Send an email to the end consumer | Push an API Message | Change the device's SIM status | Send an SMS to the device
3. Filters available are on SIM State | Custom Fields
4. Name the rule to find it later in the Rules list

Click **Activate Rule** to save to the Rules list

Tip: *You can stack Voice rules to take progressive actions, for example if a SIM uses 2 Minutes of Voice MO send an email but if it uses over 5 Minutes of Voice MO change the status to Deactivated*

Create New Rule ✕

All fields required unless marked otherwise.

1 Define Rule [Show Rule Trigger Selections](#)

Current Selections:

Category Usage Monitoring

Trigger Recent Voice Usage (24 hours)

When this happens...

If any SIM exceeds minute(s) of **MO** voice in past 24 hours

Do this...

Then to

Follow Up with

2 Set Filters [Edit Filters](#)

Current Filters
None selected

3 Name the Rule

Activate Rule [Cancel](#)



End of guide

This concludes the guide to setting up custom rules in the M2M Control Centre

If you have any questions or issues in setting up rules please contact support@m2mone.com.au or call +61 3 9696 3011 (Monday - Friday, 8:30am - 5:00pm Melbourne time).