

# OTV1.2 Features & Enhancements

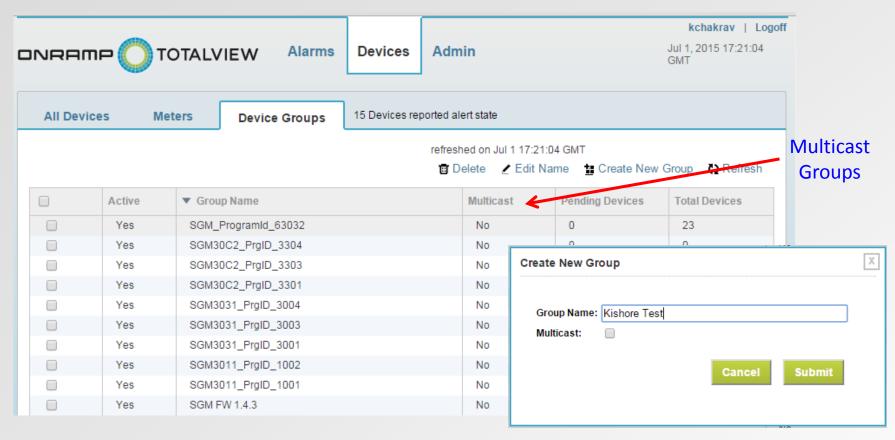
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## **Groups Functionality Modified**

- New tab called "Device Groups"
  - Lists all device groups
  - Allows creation, editing and deletion of regular and multicast groups
- Group has to be created first before devices can be added to the group
  - Check box to specify group as "multicast group" during creation
  - Multicast groups are explained in next section
- Search and select devices of interest to add devices to group
  - "Add devices to group" function available in meters/devices tab (not device groups tab)
- Devices can be added to a group via file import as well
  - MAC address is required and used as device identifier



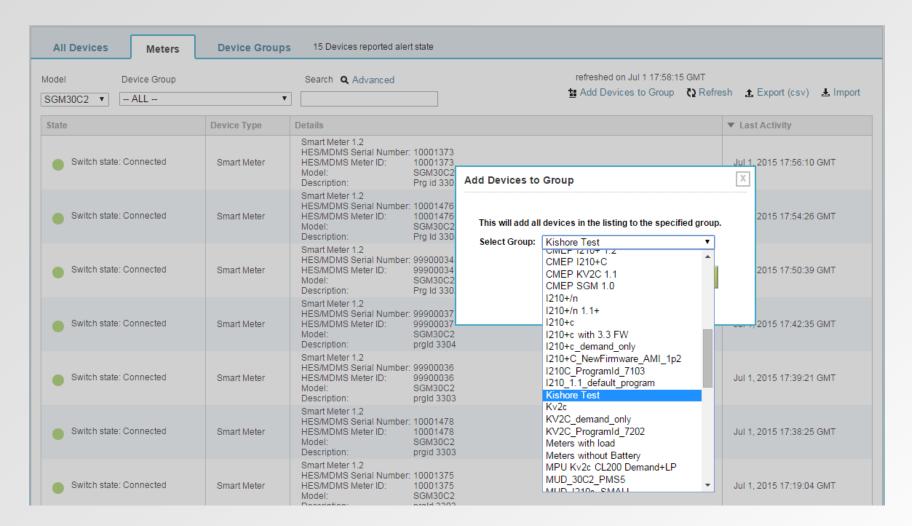
## **New "Device Groups" Tab**



- Easily select and delete multiple groups
- Create & view "multicast groups" used for meter program update



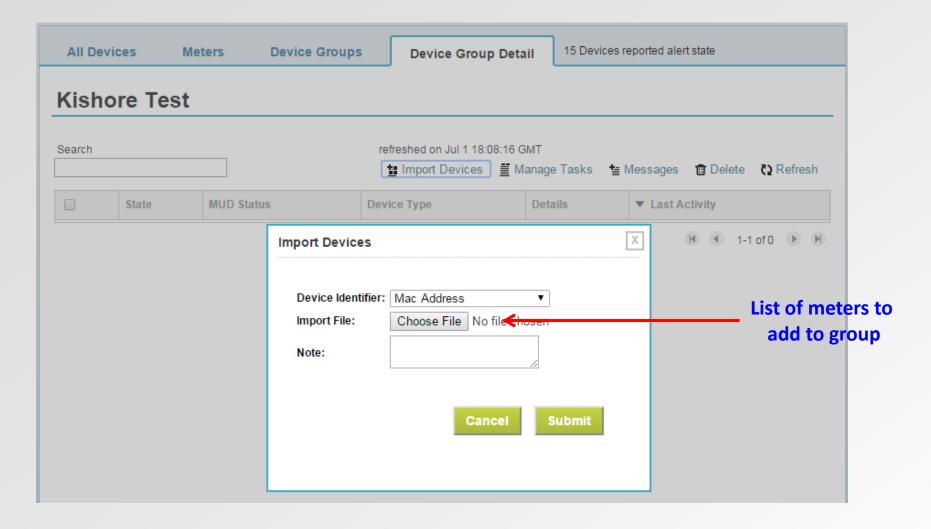
## **Add Devices to Group**



Note: New group have to be created before meters can be added to group



## Add Devices to Group – Import File



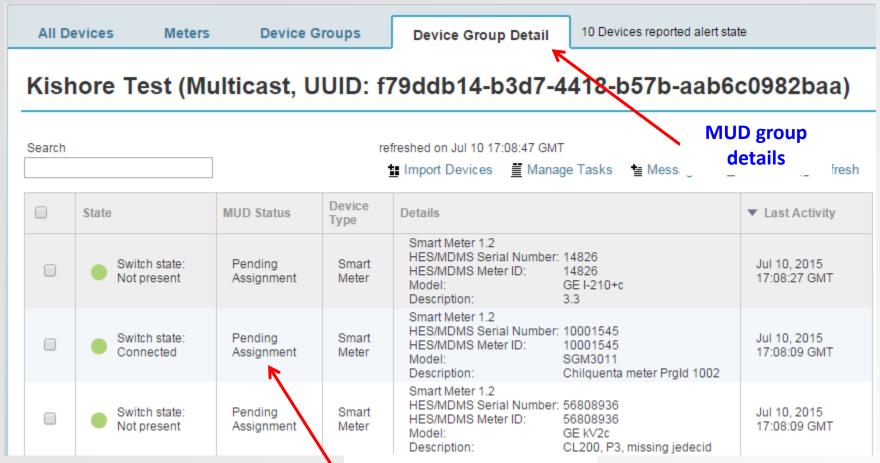


## Multicast User (MUD) Groups

- Suited for large group of devices
  - Bounded latency in delivery of command → Faster execution
- Limited set of functionality supported by MUD groups
- Only AMI1.2 meters can be added to MUD groups
- Check box to specify group as "multicast group" during creation of group
- Adding devices to MUD group is a two step process
  - When devices are added, "MUD status" in OTV will be listed as "Pending"
  - Status changes to "Assigned" after comm. system adds devices to MUD group
- Search and select devices of interest to add devices to group
  - "Add devices to group" function available in meters/devices tab
- Devices can be added to a group via file import as well
  - MAC address is required for use as identifier



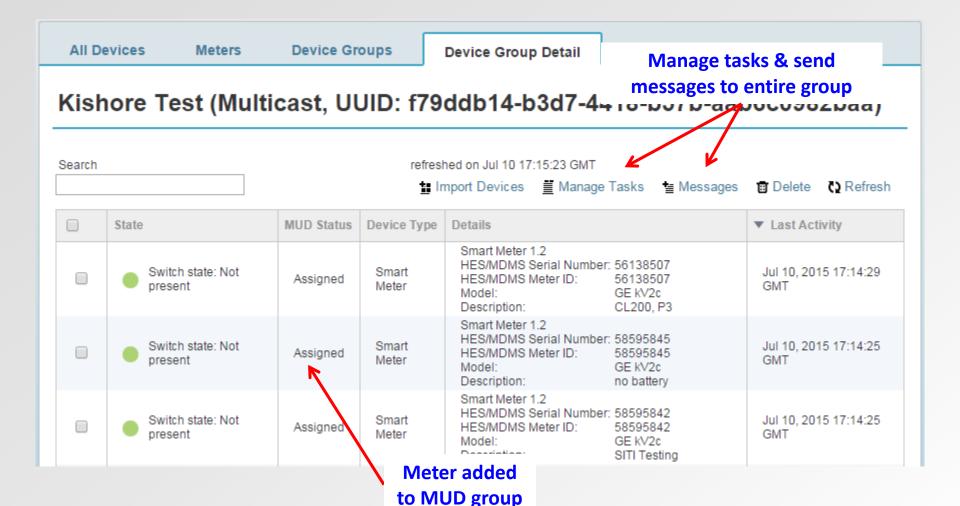
## Multicast User (MUD) Groups - "Pending"



Comm System yet to add meter to MUD group

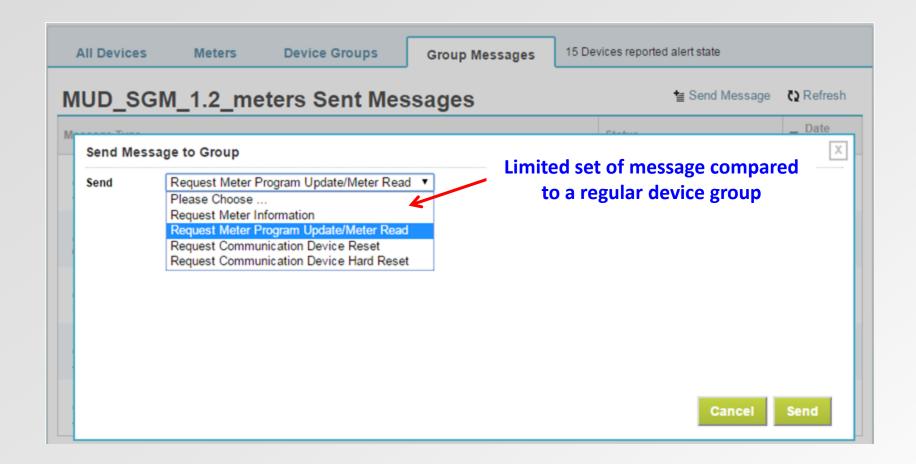


## Multicast User (MUD) Groups – "Assigned"



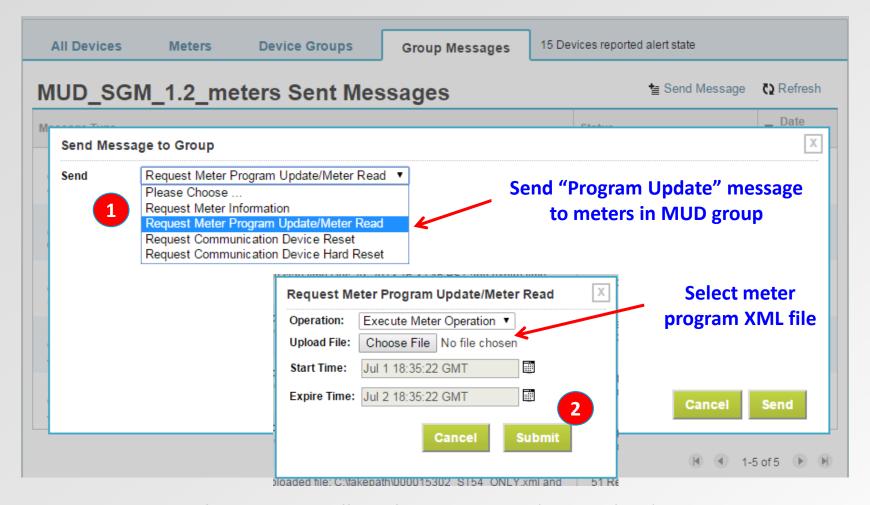


## **Send Messages to MUD Group**





## **Program Update via MUD Groups**



Start Time – When EMCM will apply program update to the devices Expire Time – Program update not applied if current time is past expiry

## **Group With Meters of Different AMI Versions**

- AMI system can function with meters on different AMI versions
- OTV groups can consist of meters with AMI 1.2/1.1/1.0 meters
  - MUD groups can consist of only AMI 1.2 meters
- Group consisting AMI 1.2 and AMI 1.0 meters
  - Only ping message can be sent to this group
- Group consisting AMI 1.2 and AMI 1.1 meters
  - All messages can be sent to this groups
  - AMI 1.1 meters silently ignore messages that feature only in AMI 1.2
- CMEP export and Demand Reset scheduled tasks possible for all groups



# **AMI1.1 Meters and Non-Applicable Commands**

Commands	AMI 1.1 Meter Behavior
Request Season Change	EMCM silently drops the command. No response sent back
Request Real Time Pricing	EMCM silently drops the command. No response sent back
Request Meter Program Update	Rejected by OTV
Request Interval Data Reading	Rejected by OTV Incorrect error message in OTV "ERROR = Load Profile Set Number Out of Range"
Request Disable Override*	kV2c: Rejected by OTV for all kV2c meters I-210+ (with switch): Main relay will disconnect

\*Note:

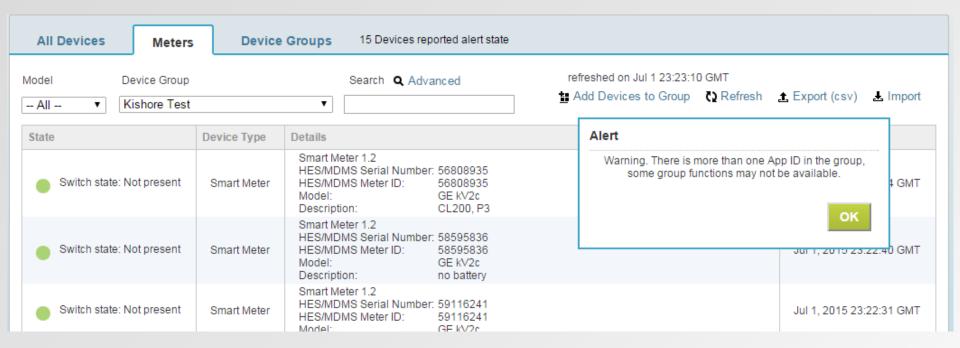
I-210+ (AMI1.2): EMCM rejects disconnect message.

No change to relay state.

I-210+c (AMI1.2) with switch: EMCM rejects disconnect request



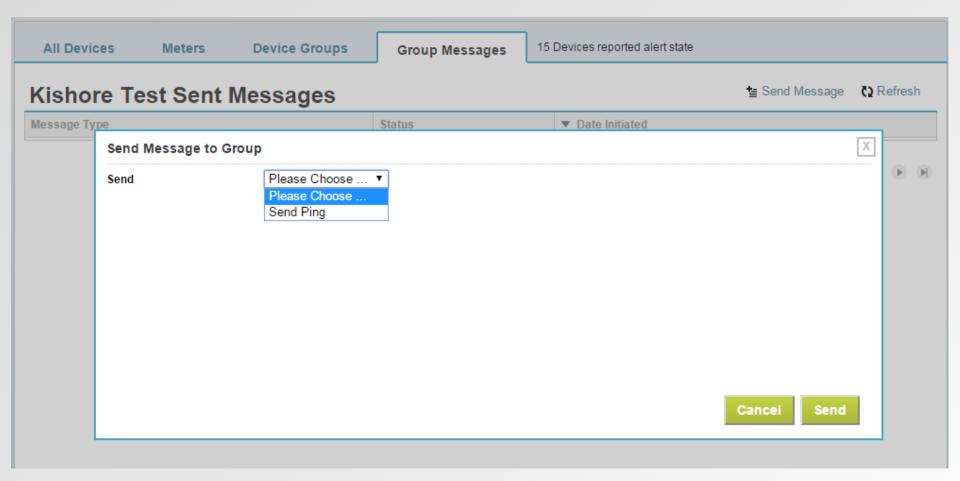
## **Group of AMI1.0 and AMI1.2 Meters**



Not all group functionality available for groups with AMI1.0 & AMI1.2 meters



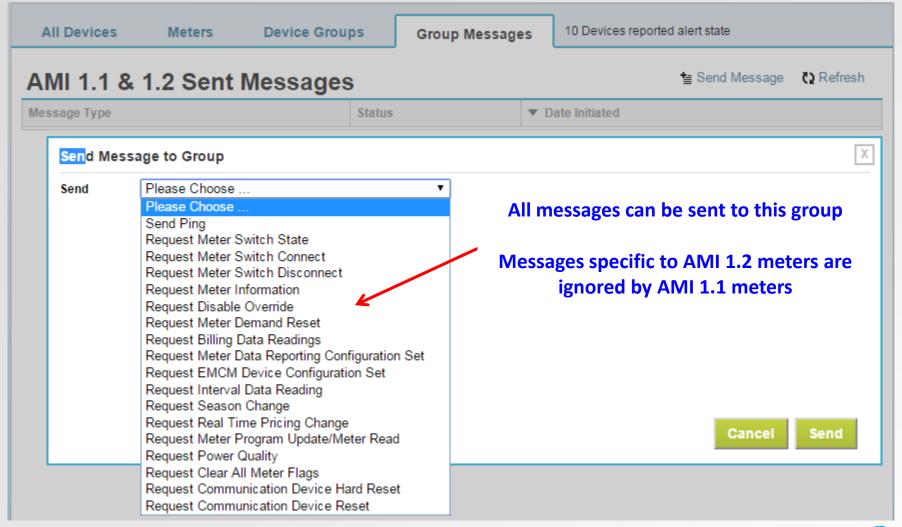
## **Group of AMI1.0 and AMI1.2 Meters**



- CMEP export and Demand Reset scheduled tasks available
- Only "Send Ping" message possible to mix group

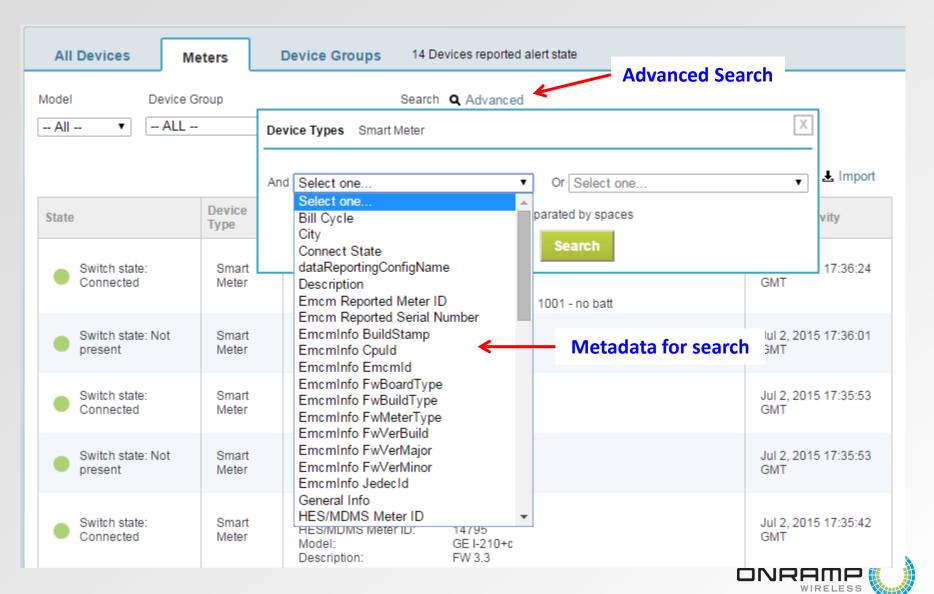


## **Group of AMI1.1 and AMI1.2 Meters**

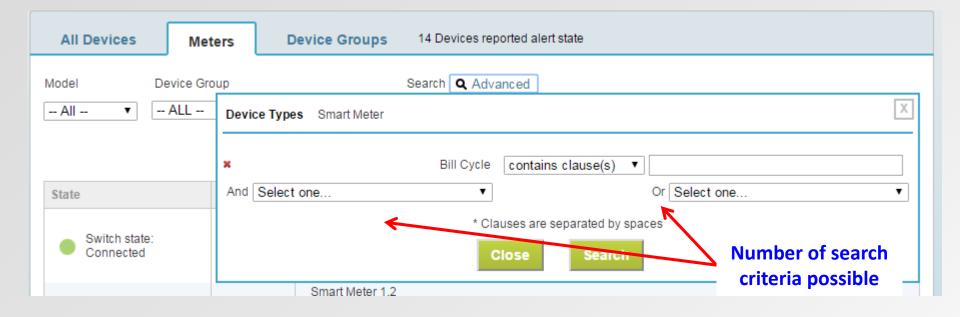




## **Advanced Search Based on Metadata**



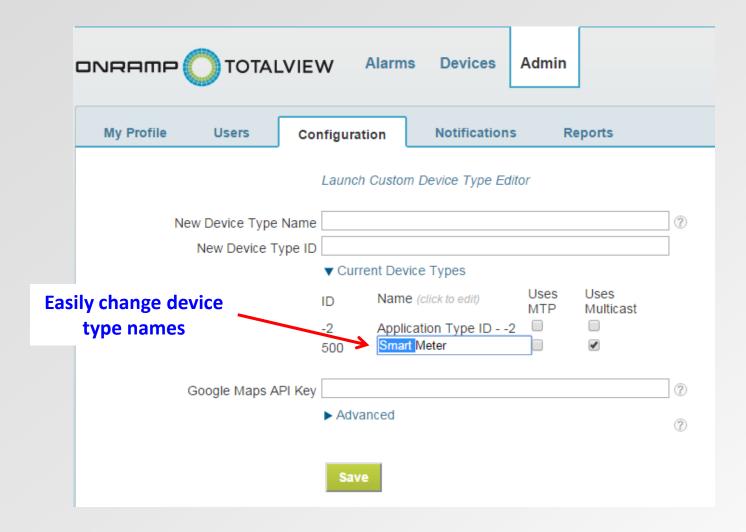
### **Advanced Search Based on Metadata**



- Users can perform device search with specific meta data names and combination of AND and OR logics
- Search can consist of multiple logic blocks:
- ({meta name 1: value [ OR value 1 OR value 2 ...]} [AND {meta name 2: value ...}])] ...) [OR ({} AND {} ...)]

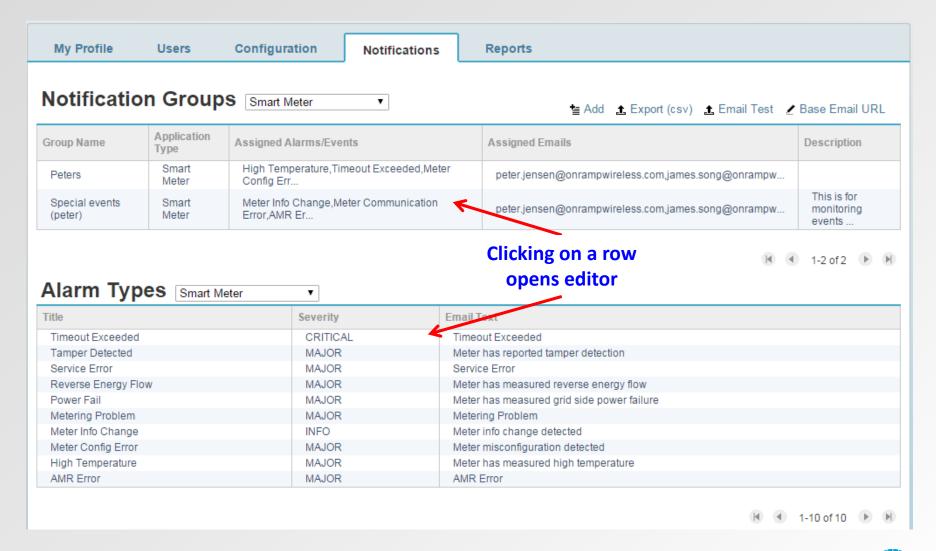


## **Admin Page - Configuration**



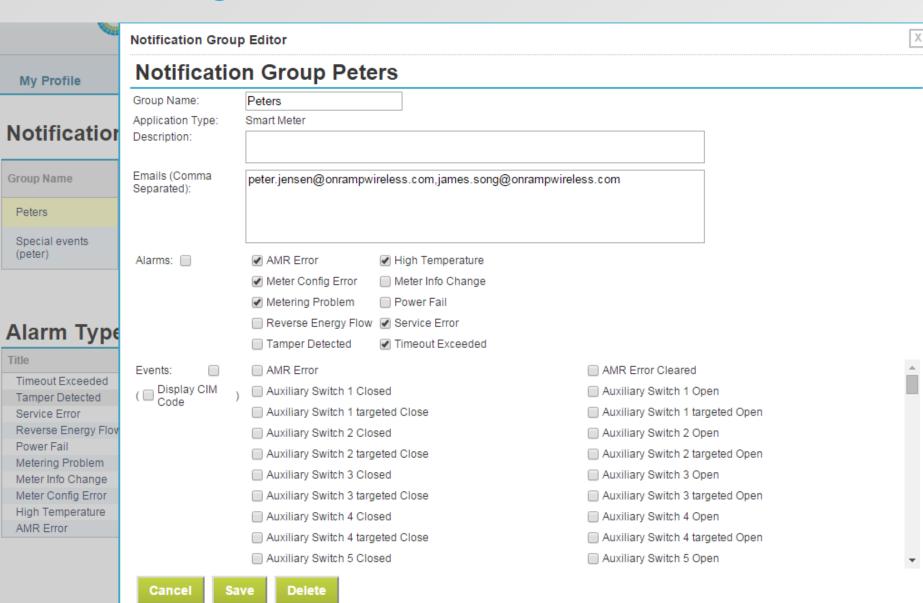


## **Revamped & Versatile Notifications**

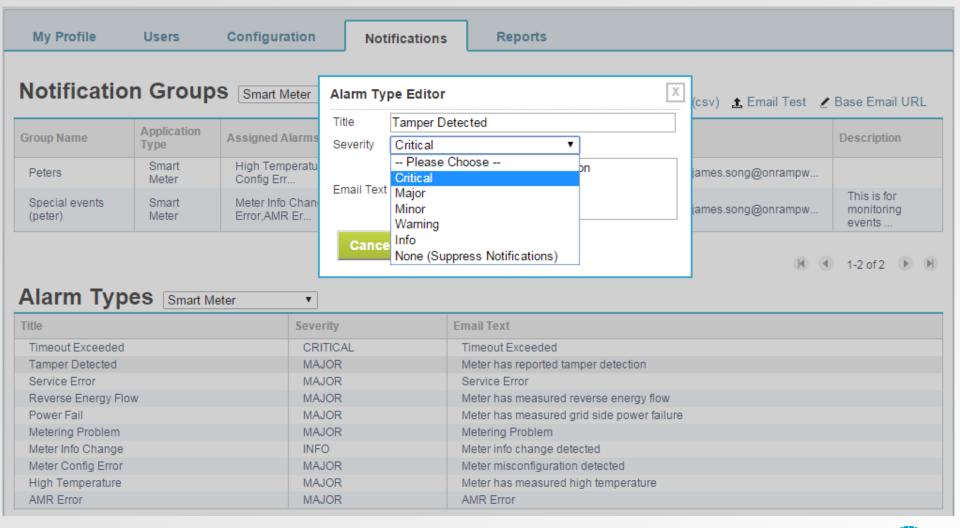




## **User Configurable Notifications**

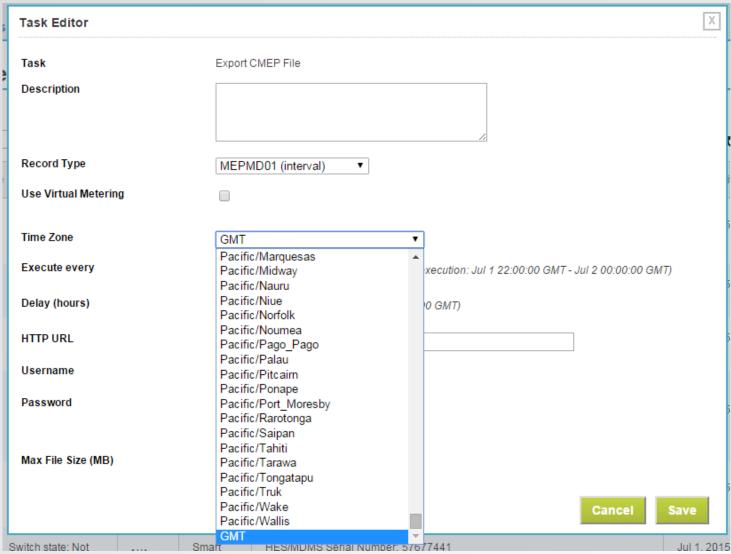


# **Change Severity of Alarm Types**

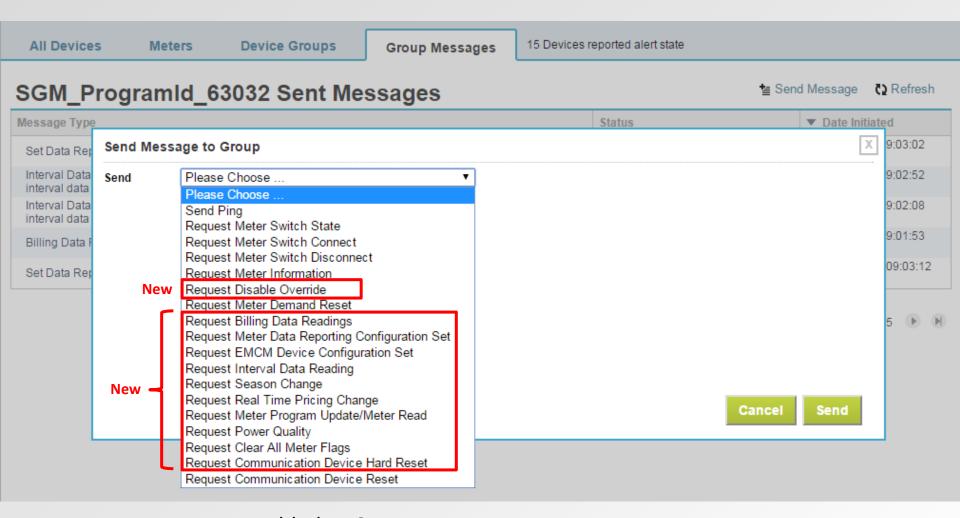




## **Meaningful DST Support**



## **Enhanced Group Messages – 1/3**



New messages added to OTV

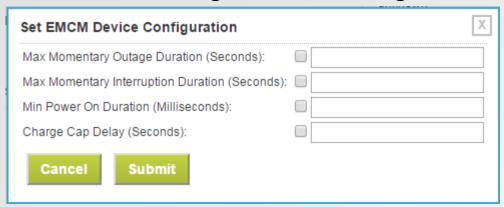


## **Enhanced Group Messages – 2/3**

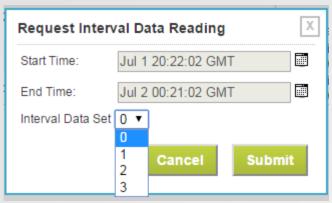
#### **Relay override**



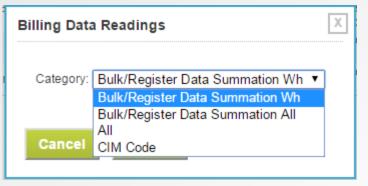
#### **Power outage detection settings**



#### Report all load profile sets



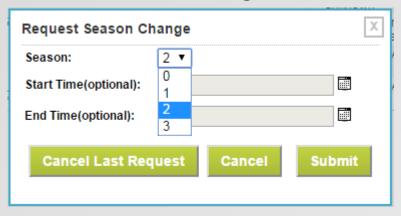
#### **Limited set of Billing UOMs**



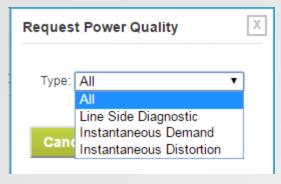


## **Enhanced Group Messages – 3/3**

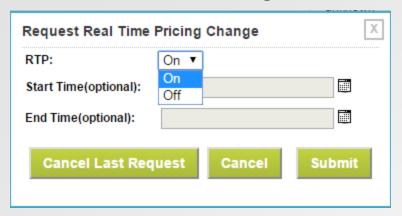
#### Season change



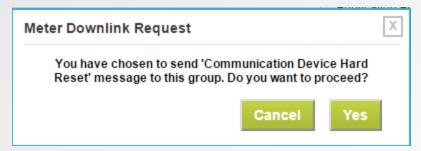
## **On-demand PQ readings**



#### RTP/CPP change

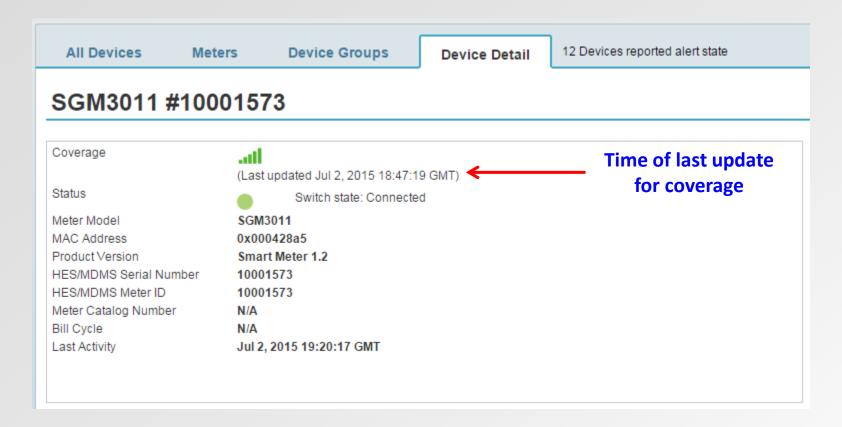


#### Hard reset of EMCM





## **Signal Coverage Information**



- Coverage status, active or stale, is known from time stamp
- Signal strength of meter is based on last update of coverage



## **Summary of OTV1.2 Enhancements**

#### **New "Device Groups" Tab**

- Lists all current device groups in OTV
- Allows creation, edition, and deletion of regular and multicast groups
- Easier management of groups

#### Multicast User (MUD) Groups

- Faster execution, with bounded latency, of commands sent to groups
- Creation of multicast groups for AMI 1.2 meters only

#### **OTA Meter Program Update**

Meter program update to group of meters using multicast

#### **Advanced Search**

 Perform device search with specific metadata and combination of AND and OR logics



## **Summary of OTV1.2 Enhancements**

#### **Improved Notifications**

- User configurable alarm & event notifications
- Change the severity of alarms, including suppress notifications

#### **Enhanced Meter Reading Capabilities**

- Scheduled and on-demand read of limited set of UOMs of billing registers
- Scheduled read of multiple/all load profile sets supported by meter
- On-demand read of power quality metrics

#### **OTA Relay Operation**

- Remote connect/disconnect of main and auxiliary relays of SGM meters
- Arm-to-connect support



## **Summary of OTV1.2 Enhancements**

#### Improvements to Demand Reset (OTV 1.2.7)

- Schedule demand resets in advance at EMCM
- Execution of demand reset at exact specified time

#### **Others**

- Remote (OTA) season change and RTP change from OTV
- Remote OTA hard reset of EMCM
- Intuitive time zone listing for all activities
- Configurable momentary & sustained outage detection setting





## Thank You!

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