

Working with Remote Destination Objects

Introduction

The Remote Destination object ensures delivery of Status Notification Reports (SNRs) to a workstation via a modem. It also makes and maintains a connection with the workstation, allowing the workstation to make a connection permanent or to deny a connection.

This chapter describes how to:

- add a Remote Destination object
- edit a Remote Destination object
- delete a Remote Destination object

Note: Remote Destination objects are not commandable.

Key Concepts

Remote Destination Object Operation

SNRs (received from Alarm objects) initiate a connection if either the Dialout Required flag is set, or the Max SNR Queue reaches the percentage set in the SNR Dial Out Level attribute.

The Remote Destination object is connected to the Serial Datalink object by setting the Port Number attribute.

The Remote Destination object performs the following tasks:

- receives status notification report messages from the Message Router object.
- sends Dial commands to the Serial Datalink object when status notification report messages need to be sent.
- notifies the Serial Datalink object to disconnect when the Dial Connect Timeout expires.

Attributes

Dial Connect Timeout

Indicates the amount of time the Remote Destination object waits to receive messages before disconnecting, following the N30-initiated Dial command.

Timeout

Indicates the amount of time remaining prior to disconnection, following the N30-initiated Dial command.

Error State

Indicates the reason for error:

None - No error.

Dial Out Failed - The Serial Datalink object failed to connect in the time set by the Retries and Retry Interval attributes. The Serial Datalink object's Connected To attribute does not change to Metasys device. If the Error State attribute is set to this state, the Remote Destination object's offline status is True.

Disconnected - The Remote Destination object currently does not need to be connected.

Max SNR Queue

Specifies the number of alarm messages that are buffered for this Remote Destination. If the queue is full, alarm messages sent to this Remote Destination to be printed may be lost.

Modem Config Object

Specifies the Modem Configuration object, which holds the modem information used by the Serial Datalink object. This attribute must be set to a Modem Configuration Class object.

Phone Number

Indicates the Dial-out phone number if a modem is connected to the port.

Port Number

Indicates the port number specifying the port to which data is sent.

Queue Used Current

Indicates the number of active entries in the report list.

Retries

Specifies how many times the Remote Destination object resends the Dial command. If the dial-up connection could not be made in the time defined as the Retry Interval, the Remote Destination object sends the Dial command again.

Retry Interval

Indicates the amount of time in which Retries occur. If the Error State attribute is set to Disconnected, the Remote Destination object retries sending the Dial command periodically in this interval.

SNR Dial Out Level

The percentage of the queue that needs to be full before dial-out occurs.

Login ID

Identifies which user is connected during a dial-up session with an M-Series Workstation.

Password

Identifies which password is connected during a dial-up session with an M-Series Workstation.

Process Identifier

Used to route notifications (alarms) to this destination. Must be a unique number for each device. If not specified, a value is automatically assigned on download.

Ack Required

Setting this value to True allows the BACnet Acknowledgement Notification messages to be passed to the M3 workstation.

Status

The *Metasys Common Object (LIT-694020)* chapter of the *Object Dictionary* details this attribute. A list of relevant states follows (listed in hierarchical order from highest to lowest):

Normal: Expected operating condition.

Active Filter

Selects the type of filtering in effect for this remote destination. The filter types are as follows:

- **Pass None** - When selected this destination receives no alarm messages.
- **Pass All** - When selected this destination receives all alarm messages.
- **Filter A** - This destination receives alarm messages based on settings of Filter A.
- **Filter B** - This destination receives alarm messages based on settings of Filter B.
- **Filter A and B** - This destination receives alarm messages based on settings of Filter A and B.

Priority Filter A

Defines which priorities this destination receives when Filter A is in effect. A value of True for a particular selection means messages of that defined priority reach this destination. Choices from highest to lowest priority are Critical, Serious, Important, Status.

Category Filter A

Defines which categories of messages the destination receives when Filter A is in effect. This filter has no effect for alarm messages without a defined category. A value of True for a particular selection means messages of that defined category reach this destination.

Msg Type Filter A

Defines which types of messages the destination receives when Filter A is in effect. A value of True for a particular selection means messages of that defined type reach this destination. Choices from highest to lowest priority are System Alert, Operator Transaction, Alarm.

Priority Filter B

Defines which priorities the destination receives when Filter B is in effect. A value of True for a particular selection means that messages of that defined priority reach this destination. Choices from highest to lowest priority are Critical, Serious, Important, Status.

Category Filter B

Defines which categories of messages the destination receives when Filter B is in effect. This filter has no effect for alarm messages without a defined category. A value of True for a particular selection means that messages of that defined category reach this destination.

Msg Type Filter B

Defines which types of messages the destination receives when Filter A is in effect. A value of True for a particular selection means messages of that defined type reach this destination. Choices from highest to lowest priority are System Alert, Operator Transaction, Alarm.

Procedure Overview

Table 30-1: Remote Destination Object Procedure Overview

| To Do This | Follow These Steps: |
|---|---|
| Add a Remote Destination Object | Browse to and highlight the Operator Devices container. Press the F3 (Add) key. Highlight Remote Destination and press Enter. Fill in the fields using Table 30-2. Press the F3 (Save) key. Check the User Assistance area of the screen to verify if the save was successful or if there were errors. Press any key to continue. Press the F4 (Cancel) key to return to the container hierarchy. |
| Edit a Remote Destination Object | Browse to and highlight a Remote Destination object. Press Enter to open the object. Press the F3 (Edit) key. Edit the fields according to Table 30-2. Press the F3 (Save) key. Check the User Assistance area of the screen to verify if the save was successful or if there were errors. Press any key to continue. Press the F4 (Cancel) key to return to the container hierarchy. |
| Delete a Remote Destination Object | Browse to and highlight a Remote Destination object. Press Enter to open the object. Press the Delete key. Press the Tab key to confirm the deletion. |

Note: The Remote Destination object has no commands.

Detailed Procedures

Adding a Remote Destination Object

To add a Remote Destination object:

1. Browse to and highlight the Operator Devices container.
2. Press the F3 (Add) key.
3. Highlight the Remote Destination object from the list that appears and press Enter. The first of two Remote Destination object configuration screens appears (Figure 30-1). The second screen is shown in Figure 30-2.

| | | | | | |
|---|--------------------|-------------------|-----------|---------------------------|--|
| Aspen Elementary: ADMIN | | Battery OK | | 02 Jan 2001 00:01:30 | |
| | | | | Wed 17 Jan 2001 10:34 CST | |
| ----- | | | | | |
| Aspen Elementary.Operator Devices.Remote Destinat | | | | | |
| ----- | | | | | |
| <u>Object</u> | | | | | |
| Object Name | [REDACTED] | | | | |
| Description | | | | | |
| Object Type | Remote Destination | | | | |
| Object Category | HVAC | | | | |
| <u>Engineering Values</u> | | | | | |
| Port Number | Port 2 | Active Filter | Pass All | | |
| Dial Connect Timeout | 60 second | Priority Filter A | [4] Items | | |
| Retry Interval | 200 second | Category Filter A | [5] Items | | |
| Retries | 3 | Msg Type Filter A | [3] Items | | |
| Password | | Priority Filter B | [4] Items | | |
| SNR Dial Out Level | 80 % | Category Filter B | [5] Items | | |
| | | Msg Type Filter B | [3] Items | | |
| Login ID | | | | | |
| Phone Number | | | | | |
| F3-Save F4-Cancel []-Page | | | | | |
| Enter an alphanumeric string | | | | | |

Figure 30-1: Remote Destination Object Configuration Screen 1

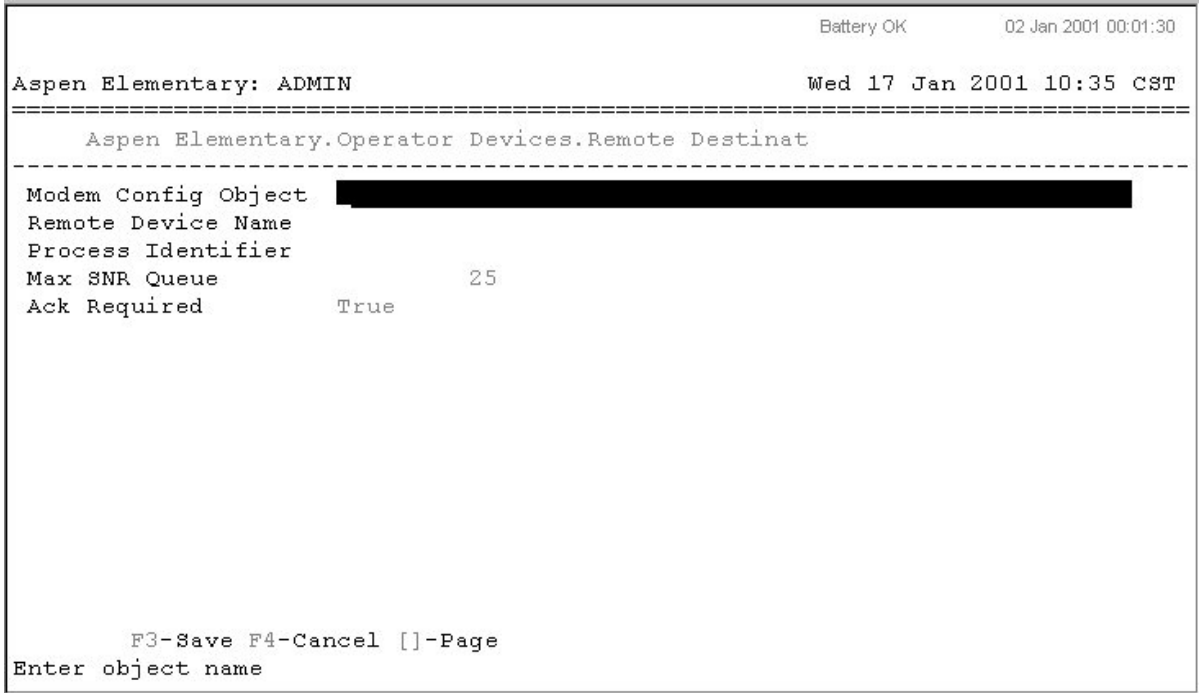


Figure 30-2: Remote Destination Object Configuration Screen 2

4. Fill in the fields using Table 30-2.

Table 30-2: Remote Destination Object Attributes

| Screen Area | Attribute | Required | Default | Options/Range |
|-------------|-----------------|----------|--------------------|--|
| Object | Object Name | No | Blank | Maximum 32 characters Invalid characters: @ . ? * \$ # : ' [] If not completed, the system assigns a name. |
| | Description | No | Blank | Maximum 40 characters |
| | Object Type | Yes | Remote Destination | The default is preset and cannot be changed. |
| | Object Category | Yes | HVAC | HVAC, Fire, Security, Services, Administrative. |

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| Screen Area (Cont.) | Attribute | Required | Default | Options/Range |
|---------------------------|----------------------|----------|---|---|
| Engineering Values | Port Number | Yes | Port 2 | Port 0, Port 1, Port 2, Port 3. Port 0 is not a valid option for this object. |
| | Dial Connect Timeout | Yes | 60 | Value greater than 0, duration of connection in seconds when call is initiated by the N30 |
| | Retry Interval | Yes | 180 | 60-600 seconds, time between dial attempts when previous dial attempts fail |
| | Retries | Yes | 3 | 0-10, number of attempts before failure |
| | Password | Yes | Blank | M-Series Workstation connection password, 13 character maximum |
| | SNR Dial Out Level | Yes | 80 % | 35-100 percent |
| | Login Id | Yes | Blank | M-Series Workstation Login ID, 20 character maximum |
| | Phone Number | Yes | Blank | M-Series Workstation modem number to dial |
| | Active Filter | Yes | Pass All | Pass None, Pass All, Filter A, Filter B, Filter A and B. |
| | Priority Filter A | Yes | [4] Items | Critical, Serious, Important, Status. |
| | Category Filter A | Yes | [5] Items | HVAC, Fire, Security, Services, Administrative. |
| | Msg Type Filter A | Yes | [3] Items | System Alert, Operator Transaction, Alarm. |
| | Priority Filter B | Yes | [4] Items | Critical, Serious, Important, Status. |
| | Category Filter B | Yes | [5] Items | HVAC, Fire, Security, Services, Administrative. |
| | Msg Type Filter B | Yes | [3] Items | System Alert, Operator Transaction, Alarm. |
| | Modem Config Object | No | Blank | Enter the exact name of the Modem Configuration object containing the required dial-out information. |
| | Remote Device Name | No | Blank | M-Series Workstation Device name |
| | Process Identifier | Yes | Blank | This value is automatically assigned during download, but must be assigned a value between 3 and 15 for the given device when it is being added from the VT100. |
| Max SNR Queue | Yes | 25 | 3-100 | |
| Ack Required | Yes | True | True/False, Passes BACnet Event Notify messages to M3 Workstation | |

5. Press F3 to save the new object.
6. Check the User Assistance area of the screen to verify if the save was successful or if there were errors. If errors were detected, correct them and resave the entries. Once the save is successful, continue with Step 7.

7. Press any key to continue.
8. Press the F4 (Cancel) key to return to the container hierarchy.

Editing a Remote Destination Object

To edit a Remote Destination object:

1. Browse to and highlight a Remote Destination object.
2. Press Enter to open the object.
3. Press the F3 (Edit) key. The Remote Destination object attribute screen appears. See Figure 30-1 and Figure 30-2.
4. Edit the fields according to Table 30-2.
5. Press the F3 (Save) key.
6. Check the User Assistance area of the screen to verify if the save was successful or if there were errors. If errors were detected, correct them and resave the entries. Once the save is successful, continue with Step 7.
7. Press any key to continue.
8. Press the F4 (Cancel) key to return to the container hierarchy.

Deleting a Remote Destination Object

To delete a Remote Destination object:

1. Browse to and highlight a Remote Destination object.
2. Press Enter to open the object.
3. Press the Delete key.
4. Press the Tab key to confirm the deletion.