



IP SLAs Multi Operation Scheduler

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Feature History for IP SLAs - Multi Operation Scheduler

This table provides release and platform support information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature Name and Description	Supported Platform
Cisco IOS XE 17.18.1	IP SLAs - Multi Operation Scheduler: Multiple operations scheduling in IP SLAs allows you to schedule several IP SLAs operations simultaneously using a single command via the CLI or the CISCO-RTTMON-MIB.	Cisco C9350 Series Smart Switches Cisco C9610 Series Smart Switches

IP SLAs Multi Operation Scheduler

Multiple operations scheduling in IP SLAs allows you to schedule several IP SLAs operations simultaneously using a single command via the CLI or the CISCO-RTTMON-MIB.

Normal scheduling of IP SLAs operations allows scheduling only one operation at a time, which becomes inefficient and time-consuming when managing large networks with thousands of IP SLAs operations for monitoring network performance. This approach requires individually scheduling each operation, leading to significant manual effort and potential delays in comprehensive network monitoring.

IP SLAs Multioperation Scheduler allows scheduling multiple IP SLAs operations simultaneously as a group. This method reduces manual configuration, evenly distributes operations over a specified schedule period to minimize CPU load, and improves scalability and monitoring efficiency in large network environments

How IP SLAs Multioperation Scheduler works

Summary

IP SLAs Multioperation Scheduler requires specifying the operation ID numbers and the total time range over which these operations should start. It then automatically distributes the operations evenly at calculated intervals within that time frame. This even distribution helps control the amount of monitoring traffic, minimizes CPU utilization, and significantly enhances network scalability by preventing resource overload during operation start times

The IP SLAs multiple operations scheduling functionality allows to schedule multiple IP SLAs operations as a group, using the following configuration parameters:

- Group operation number: Group configuration or group schedule number of the IP SLAs operation to be scheduled.
- Operation ID numbers: A list of IP SLAs operation ID numbers in the scheduled operation group.
- Schedule period: The amount of time for which the IP SLAs operation group is scheduled.
- Ageout: The amount of time to keep the operation in memory when it is not actively collecting information. By default, the operation remains in memory indefinitely.
- Frequency: The amount of time after which each IP SLAs operation is restarted. When the frequency option is specified, it overwrites the operation frequency of all operations belonging to the group. Note that when the frequency option is not specified, the frequency for each operation is set to the value of the schedule period.
- Life: The amount of time the operation actively collects information. The operation can be configured to run indefinitely. By default, the lifetime of an operation is one hour.
- Start time: Time when the operation starts collecting information. You can specify an operation to start immediately or at an absolute start time using hours, minutes, seconds, day, and month.

The IP SLAs multiple operations scheduling functionality attempts to schedule the maximum number of operations possible without aborting. It automatically skips any IP SLAs operations that are already running or those that are not configured, that is it does not exist. Despite skipping these operations, the total number of operations considered is based on the number specified in the scheduling command, regardless of how many are missing or already running. When you schedule operations that are missing or already active, the

system displays a message indicating the number of active and missing operations. These messages appear only in such cases to inform you about the status of the operations being scheduled

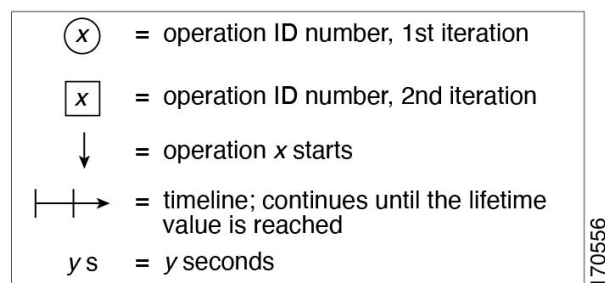
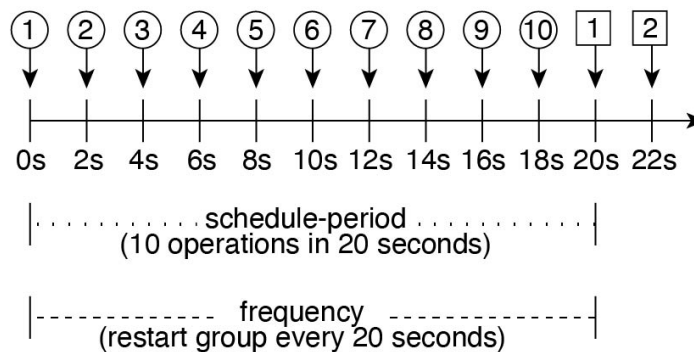
For IP SLAs multiple operations scheduling, it is important that the operations you schedule are of the same type and have the same frequency. If you do not explicitly specify a frequency for the operations, the system uses the default frequency, which is set to be the same as the schedule period. The schedule period defines the total time frame during which all the specified operations should run. This ensures that the operations are evenly distributed and synchronized within the given time range, optimizing network performance monitoring and resource utilization

Default behavior of IP SLAs Multiple Operations Scheduler

The figure below illustrates the scheduling of operation group 1 that includes operation 1 to operation 10. Operation group 1 has a schedule period of 20 seconds, which means that all operations in the group will be started at equal intervals within a 20-second period. By default, the frequency is set to the same value as the configured schedule period. As shown in the figure below, configuring the frequency is optional because 20 is the default.

Figure 1: Schedule period equals frequency: Default behavior

ip sla group schedule 1 1-10 schedule-period 20 [frequency 20]



In this example, the first operation (operation 1) in operation group 1 will start at 0 seconds. All 10 operations in operation group 1 (operation 1 to operation 10) must be started in the schedule period of 20 seconds. The start time of each IP SLAs operation is evenly distributed over the schedule period by dividing the schedule period by the number of operations (20 seconds divided by 10 operations). Therefore, each operation will start 2 seconds after the previous operation.

The frequency in IP SLAs multiple operations scheduling defines the interval before the operation group starts again, that is how often the operations repeat. If you do not specify a frequency, it defaults to the value of the schedule period, which is the total time over which all specified operations are distributed and run. This means

the operations will repeat after the schedule period unless a different frequency is explicitly. In the example shown above, operation group 1 will start again every 20 seconds. This configuration provides optimal division (spacing) of operations over the specified schedule period.

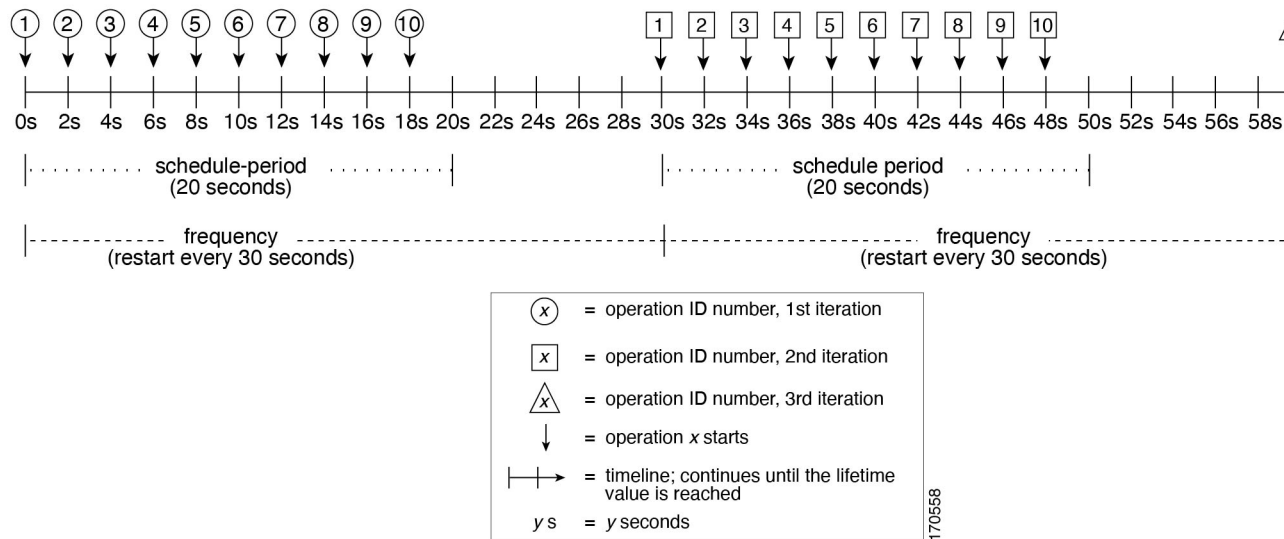
IP SLAs multiple Operations Scheduler with scheduling period less than frequency

The frequency value in IP SLAs multiple operations scheduling is the amount of time that passes before the entire schedule group is restarted. If the schedule period is less than the frequency, there will be a period of time during which no operations are started. This means that after all operations have run within the schedule period, there is a waiting interval before the next cycle begins, resulting in a temporary pause in operation starts.

The figure below illustrates the scheduling of operation 1 to operation 10 within operation group 2. Operation group 2 has a schedule period of 20 seconds and a frequency of 30 seconds.

Figure 2: Schedule period is less than frequency

ip sla group schedule 2 1-10 schedule-period 20 frequency 30



In this example, the first operation (operation 1) in operation group 2 will start at 0 seconds. All 10 operations in operation group 2 (operation 1 to operation 10) must be started in the schedule period of 20 seconds. The start time of each IP SLAs operation is evenly distributed over the schedule period by dividing the schedule period by the number of operations (20 seconds divided by 10 operations). Therefore, each operation will start 2 seconds after the previous operation.

In the first iteration of operation group 2, operation 1 starts at 0 seconds, and the last operation (operation 10) starts at 18 seconds. However, because the group frequency has been configured to 30 seconds each operation in the operation group is restarted every 30 seconds. So, after 18 seconds, there is a gap of 10 seconds as no operations are started in the time from 19 seconds to 29 seconds. Hence, at 30 seconds, the second iteration of operation group 2 starts. As all ten operations in the operation group 2 must start at an evenly distributed interval in the configured schedule period of 20 seconds, the last operation (operation 10) in the operation group 2 will always start 18 seconds after the first operation (operation 1).

As illustrated in the figure above, the following events occur:

- At 0 seconds, the first operation (operation 1) in operation group 2 is started.
- At 18 seconds, the last operation (operation 10) in operation group 2 is started. This means that the first iteration (schedule period) of operation group 1 ends here.
- From 19 to 29 seconds, no operations are started.
- At 30 seconds, the first operation (operation 1) in operation group 2 is started again. The second iteration of operation group 2 starts here.
- At 48 seconds (18 seconds after the second iteration started) the last operation (operation 10) in operation group 2 is started, and the second iteration of operation group 2 ends.
- At 60 seconds, the third iteration of operation group 2 starts.

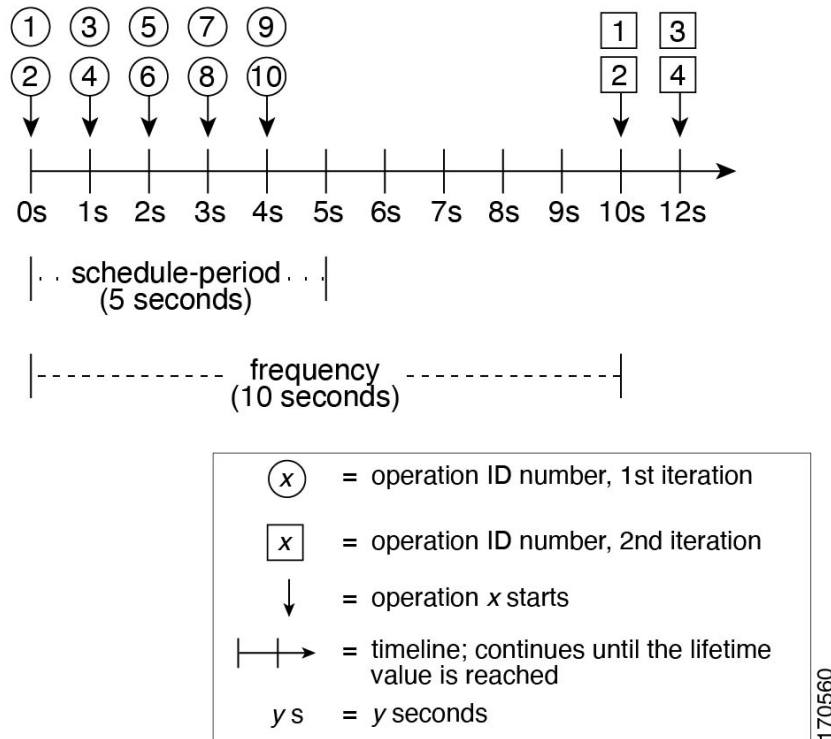
This process continues until the lifetime of operation group 2 ends. The lifetime value is configurable. The default lifetime for an operation group is forever.

Multiple operations scheduler: When the number of IP SLAs operations are greater than the schedule period

The minimum time interval between the start of IP SLAs operations in a multiple operations scheduling group is 1 second. When the number of operations to be scheduled exceeds the schedule period, the IP SLAs multiple operations scheduling functionality will schedule more than one operation to start within the same 1-second interval. If the number of operations does not divide evenly into 1-second intervals, the operations are distributed equally at the start of the schedule period, with any remaining operations scheduled to start at the last 1-second interval. This approach ensures that all operations are scheduled within the specified schedule period while respecting the minimum 1-second start interval constraint.

The figure below illustrates the scheduling of operation 1 to operation 10 within operation group 3. Operation group 3 has a schedule period of 5 seconds and a frequency of 10 seconds.

Figure 3: Number of IP SLAs operations is greater than the schedule period-even distribution

ip sla group schedule 3 1-10 schedule-period 5 frequency 10

In this example, when dividing the schedule period by the number of operations (5 seconds divided by 10 operations, which equals one operation every 0.5 seconds) the start time of each IP SLAs operation is less than 1 second. Since the minimum time interval between the start of IP SLAs operations in a group operation is 1 second, the IP SLAs multiple operations scheduling functionality instead calculates how many operations it should start in each 1-second interval by dividing the number of operations by the schedule period (10 operations divided by 5 seconds). Therefore, as shown in the figure above, two operations will be started every 1 second.

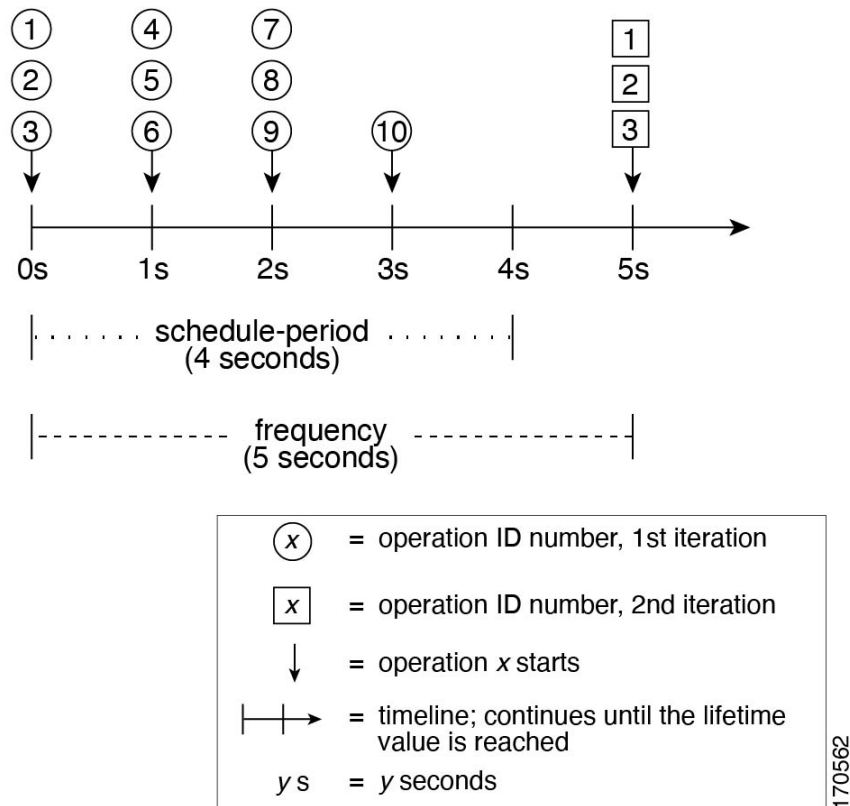
As the frequency is set to 10 in this example, each iteration of operation group 3 will start 10 seconds after the start of the previous iteration. However, this distribution is not optimal as there is a gap of 5 seconds (frequency minus schedule period) between the cycles.

If the number of operations getting scheduled does not equally divide into 1-second intervals, then the operations are equally divided at the start of the schedule period with the remaining operations to start at the last 1-second interval.

The figure below illustrates the scheduling of operation 1 to operation 10 within operation group 4. Operation group 4 has a schedule period of 4 seconds and a frequency of 5 seconds.

Figure 4: Number of IP SLAs operations is greater than the schedule period: uneven distribution

ip sla group schedule 4 1-10 schedule-period 4 frequency 5



In this example, the IP SLAs multiple operations scheduling functionality calculates how many operations it should start in each 1-second interval by dividing the number of operations by the schedule period (10 operations divided by 4 seconds, which equals 2.5 operations every 1 second). Since the number of operations does not equally divide into 1-second intervals, this number will be rounded off to the next whole number (see the figure above) with the remaining operations to start at the last 1-second interval.

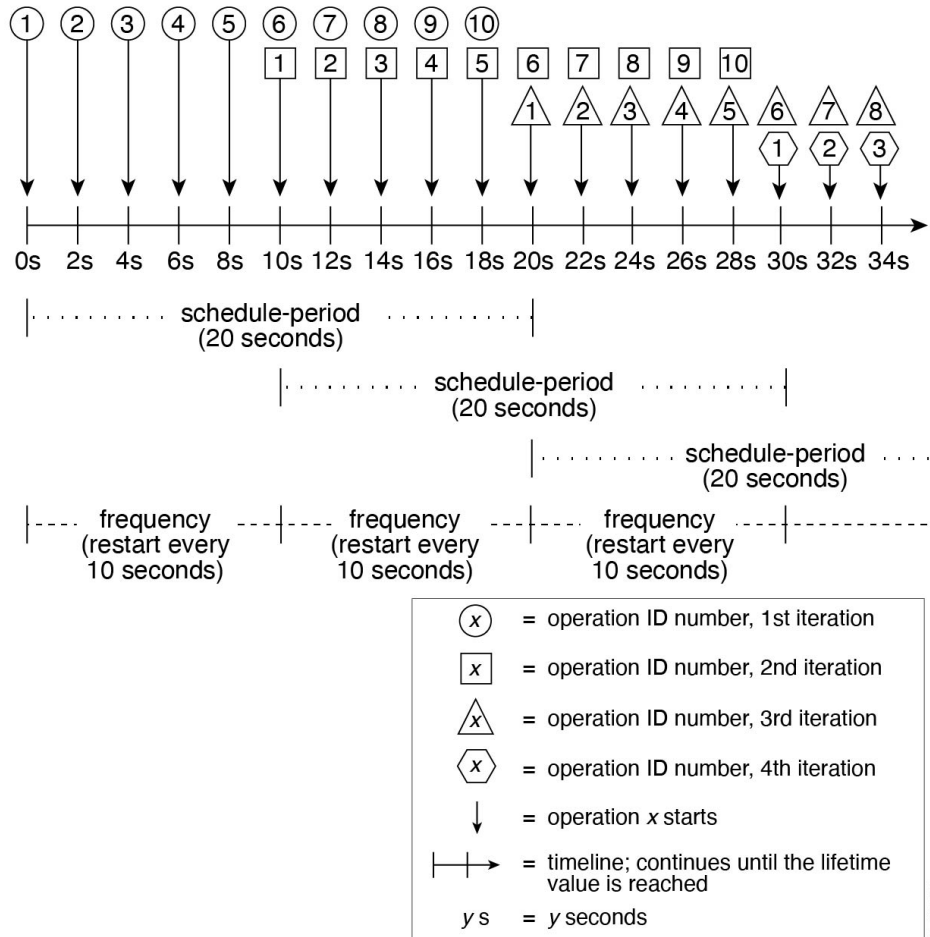
IP SLAs multiple operations scheduling with scheduling period greater than frequency

When the schedule period is greater than the frequency in IP SLAs multiple operations scheduling, the operations from one iteration of the operation group will overlap with the operations of the following iteration. This means that before the first group of operations has completed its schedule period, the next group starts, causing concurrent execution of operations from both iterations. This overlap can lead to increased load during the overlapping time frame, as multiple sets of operations run simultaneously. The frequency value determines how often the schedule group restarts, so if it is less than the schedule period, overlapping occurs accordingly.

The figure below illustrates the scheduling of operation 1 to operation 10 within operation group 5. Operation group 5 has a schedule period of 20 seconds and a frequency of 10 seconds.

Figure 5: IP SLAs group scheduling with schedule period greater than frequency

ip sla group schedule 5 1-10 schedule-period 20 frequency 10



In this example, the first operation (operation 1) in operation group 5 will start at 0 seconds. All 10 operations in operation group 5 (operation 1 to operation 10) must be started in the schedule period of 20 seconds. The start time of each IP SLAs operation is evenly distributed over the schedule period by dividing the schedule period by the number of operations (20 seconds divided by 10 operations). Therefore, each operation will start 2 seconds after the previous operation.

In the first iteration of operation group 5, operation 1 starts at 0 seconds, and operation 10, the last operation in the operation group, starts at 18 seconds. Because the operation group is configured to restart every 10 seconds (frequency 10), the second iteration of operation group 5 starts again at 10 seconds, before the first iteration is completed. Therefore, an overlap of operations 6 to 10 of the first iteration occurs with operations 1 to 5 of the second iteration during the time period of 10 to 18 seconds (see the figure above). Similarly, there is an overlap of operations 6 to 10 of the second iteration with operations 1 to 5 of the third iteration during the time period of 20 to 28 seconds.

In this example, the start time of operation 1 and operation 6 need not be at exactly the same time, but will be within the same 2-second interval.

The configuration described in this section is not recommended as you can configure multiple operations to start within the same 1-second interval by configuring the number of operations greater than the schedule

period. For information, see the "Multiple Operations Scheduling When the Number of IP SLAs Operations Are Greater Than the Schedule Period" section.

IP SLAs random scheduler

The IP SLAs Random Scheduler feature is an enhancement to the existing IP SLAs multioperation scheduler.

The IP SLAs Multioperation Scheduling feature allows you to schedule multiple IP SLAs operations to start at equally distributed intervals over a specified time duration and to restart at a defined frequency. This helps in reducing network load by spreading out the operations evenly, improving monitoring consistency.

The IP SLAs Random Scheduler feature enhances this by scheduling multiple IP SLAs operations to start at random intervals uniformly distributed over the schedule period. Additionally, the operations restart at random frequencies uniformly distributed within a configured frequency range. This randomization improves the statistical accuracy of network performance assessments by avoiding synchronized operation starts that could mask transient network issues.



Note The IP SLAs random scheduler is not in compliance with RFC2330 because it does not account for inter-packet randomness.

The IP SLAs random scheduler option is disabled by default.

To enable the random scheduler option, you must set a frequency range when configuring a group schedule in global configuration mode. The group of operations restarts at uniformly distributed random frequencies within the specified frequency range. The following guidelines apply for setting the frequency range:

- The starting value of the frequency range should be greater than the timeout values of all the operations in the group operation.
- The starting value of the frequency range should be greater than the schedule period (amount of time for which the group operation is scheduled). This guideline ensures that the same operation does not get scheduled more than once within the schedule period.

The following guidelines apply if the random scheduler option is enabled:

- The individual operations in a group operation will be uniformly distributed to begin at random intervals over the schedule period.
- The group of operations restarts at uniformly distributed random frequencies within the specified frequency range.
- The minimum time interval between the start of each operation in a group operation is 100 milliseconds (0.1 seconds). If the random scheduler option is disabled, the minimum time interval is 1 second.
- Only one operation can be scheduled to begin at any given time. If the random scheduler option is disabled, multiple operations can begin at the same time.
- The first operation will always begin at 0 milliseconds of the schedule period.
- The order in which each operation in a group operation begins is random.

Benefit of IP SLAs Multiple Operations Scheduler

Scheduling multiple IP SLAs operations by distributing them equally over a scheduled period significantly reduces the load on the network and provides more consistent monitoring coverage. For example, if 60 operations are configured to start simultaneously within a 1-second interval over a 60-second schedule period, a network failure occurring 30 seconds after all operations have started might go undetected if the network is restored before the next start time. This is because all operations would have been active at the same time and then stopped, missing the failure window. However, if these 60 operations are evenly distributed at 1-second intervals over the 60-second period, some operations would be active during the failure, allowing detection. Conversely, if all operations run simultaneously and a failure occurs, all would fail, potentially exaggerating the severity of the failure. Thus, distributing operations helps achieve more accurate and reliable network performance monitoring by avoiding simultaneous operation starts and reducing false severity indications.

Guidelines for IP SLAs Multioperation Scheduler

- Do not use the **no ip sla group schedule** and **ip sla group schedule** commands consecutively in a configuration file and copy it into the running configuration. This causes some of the Service Level Agreement (SLA) probes to go down.
- Configure the IP SLAs operations to be included in a group before scheduling the group.
- Determine the IP SLAs operations you want to schedule as a single group.
- Identify the network traffic type and the location of your network management station.
- Identify the topology and the types of devices in your network.
- Decide on the frequency of testing for each operation.

How to configure an IP SLAs multioperation scheduler

These sections provide configuration information on IP SLAs multioperation scheduler.

Schedule multiple IP SLAs operations

Before you begin

- All IP SLAs operations to be scheduled must be already configured.
- The frequency of all operations scheduled in a multioperation group should be the same.
- List of one or more operation ID numbers to be added to a multioperation group is limited to a maximum of 125 characters, including commas (,).

Perform this task to schedule multiple IP SLAs operations

Procedure

Step 1 enable

Example:

```
Device> enable
```

Enables privileged EXEC mode.

Enter your password, if prompted.

Step 2 configure terminal

Example:

```
Device# configure terminal
```

Enters global configuration mode.

Step 3 **ip sla group schedule** *group-operation-number operation-id-numbers schedule-period schedule-period-range [ageout seconds] [frequency group-operation-frequency] [life {forever | seconds}] [start-time {hh:mm[:ss] [month day | day month] | pending | now | after hh:mm:ss}]*

Example:

```
Device(config)# ip sla group schedule 1 3,4,6-9 schedule-period 50 frequency range 80-100
```

Specifies an IP SLAs operation group number and the range of operation numbers to be scheduled in global configuration mode.

- **group-operation-number**: Identification number for the group of IP SLAs operations to be scheduled (range 0 to 65535).
- **operation-id-numbers**: List of one or more operation ID numbers to include in the multioperation schedule. You can specify individual IDs or ranges separated by commas (e.g., 3, 4, 6-9). The total length can be up to 125 characters.
- **schedule-period schedule-period-range**: Specifies the amount of time (in seconds) over which the group of operations is scheduled to start. The schedule period defines the duration in which all specified operations should run.
- **ageout seconds**: Number of seconds to keep the IP SLAs operations in memory when they are not actively collecting information. Default is 0 (never ages out).
- **frequency group-operation-frequency**: Number of seconds after which each IP SLAs operation is restarted. This overrides the frequency of all operations in the group. The frequency can be a fixed number of seconds or a range for random scheduling, for example the range is from 80 to 100.
- **life {forever | seconds}** (optional): Specifies how long the operations will actively collect information. *forever* means indefinitely; otherwise, specify the number of seconds.
- **start-time {hh:mm[:ss] [month day | day month] | pending | now | after hh:mm:ss}**: Specifies when the group of operations will start. Options include:
 - Absolute time with optional date, for example 13:01:30 Jul 15.
 - **pending**: This is the default. No data collection

- **now**: Starts immediately.
- **after *hh:mm:ss***: Starts after a delay from the command entry time)

Step 4 **exit****Example:**

```
Device(config)# exit
```

Returns to the privileged EXEC mode.

Step 5 **show ip sla group schedule****Example:**

```
Device# show ip sla group schedule
```

(Optional) Displays the IP SLAs group schedule details.

Step 6 **show ip sla configuration****Example:**

```
Device# show ip sla configuration
```

(Optional) Displays the IP SLAs configuration details.

Enable the IP SLAs random scheduler

Perform this task to enable the IP SLAs random scheduler.

Procedure

Step 1 **enable****Example:**

```
Device> enable
```

Enables privileged EXEC mode.

Enter your password, if prompted.

Step 2 **configure terminal****Example:**

```
Device# configure terminal
```

Enters global configuration mode.

Step 3 **ip sla group schedule** *group-operation-number operation-id-numbers schedule-period schedule-period-range*
[*ageout seconds*] [**frequency** *group-operation-frequency*] [**life** {**forever** | *seconds*}] [**start-time** {*hh:mm*
[:*ss*] [*month day* | *day month*] | **pending** | **now** | **after** *hh:mm:ss*}]**Example:**

```
Device(config)# ip sla group schedule 1 3,4,6-9 schedule-period 50 frequency range 80-100
```

Specifies an IP SLAs operation group number and the range of operation numbers to be scheduled in global configuration mode.

- **group-operation-number**: Identification number for the group of IP SLAs operations to be scheduled (range 0 to 65535).
- **operation-id-numbers**: List of one or more operation ID numbers to include in the multioperation schedule. You can specify individual IDs or ranges separated by commas (e.g., 3, 4, 6-9). The total length can be up to 125 characters.
- **schedule-period** *schedule-period-range*: Specifies the amount of time (in seconds) over which the group of operations is scheduled to start. The schedule period defines the duration in which all specified operations should run.
- **ageout** *seconds*: Number of seconds to keep the IP SLAs operations in memory when they are not actively collecting information. Default is 0 (never ages out).
- **frequency** *group-operation-frequency*: Number of seconds after which each IP SLAs operation is restarted. This overrides the frequency of all operations in the group. The frequency can be a fixed number of seconds or a range for random scheduling, for example the range is from 80 to 100.
- **life** {**forever** | *seconds*} (optional): Specifies how long the operations will actively collect information. *forever* means indefinitely; otherwise, specify the number of seconds.
- **start-time** {*hh:mm[:ss]* [*month day* | *day month*] | **pending** | **now** | **after** *hh:mm:ss*}: Specifies when the group of operations will start. Options include:
 - Absolute time with optional date, for example 13:01:30 Jul 15.
 - **pending**: This is the default. No data collection
 - **now**: Starts immediately.
 - **after** *hh:mm:ss*: Starts after a delay from the command entry time)

Step 4 **exit**

Example:

```
Device(config)# exit
```

Returns to the privileged EXEC mode.

Configuration examples for an IP SLAs multi operation scheduler

The following sections provide configuration examples for an IP SLAs multioperation scheduler.

Example: Enable the IP SLAs random scheduler

The following example shows how to schedule IP SLAs operations 1 to 3 as a group (identified as group 2). In this example, the operations are scheduled to begin at uniformly distributed random intervals over a schedule period of 50 seconds. The first operation is scheduled to start immediately. The interval is chosen from the specified range upon every invocation of the probe. The random scheduler option is enabled and the uniformly

distributed random frequencies at which the group of operations will restart is chosen within the range of 80-100 seconds.

```
Device> enable
Device# configure terminal
Device(config)# ip sla group schedule 2 1-3 schedule-period 50 frequency range 80-100
start-time now
```

Example: Schedule multiple IP SLAs operations

The following example shows how to schedule IP SLAs operations 1 to 10 in the operation group 1 with a schedule period of 20 seconds. By default, the frequency is equivalent to the schedule period.

```
Device> enable
Device# configure terminal
Device(config)# ip sla group schedule 1 1-10 schedule-period 20
```

Example: Verify the IP SLAs multioperation schedulers

The following example shows the details of the scheduled multiple IP SLAs operation using the **show ip sla group schedule** command. The last line in the example indicates that the IP SLAs operations are multiple scheduled (TRUE).

```
Device# show ip sla group schedule
Multi-Scheduling Configuration:
Group Entry Number: 1
Probes to be scheduled: 1-10
Schedule period :20
Group operation frequency: 20
Multi-scheduled: TRUE
```

Example: Schedule multiple IP SLAs operations

The following example schedules IP SLAs operations 1 through 20 in the operation group 1 with a schedule period of 60 seconds and a life value of 1200 seconds. By default, the frequency is equivalent to the schedule period. In this example, the start interval is 3 seconds (schedule period divided by number of operations).

```
Device> enable
Device# configure terminal
Device(config)# ip sla group schedule 1 1-20 schedule-period 60 life 1200
```

Example: Verify the IP SLAs multioperation schedulers

The following example shows the details of the scheduled multiple IP SLAs operation using the **show ip sla group schedule** command.

```
Device# show ip sla group schedule
Group Entry Number: 1
Probes to be scheduled: 1-20
Total number of probes: 20
Schedule period: 60
Group operation frequency: Equals schedule period
Status of entry (SNMP RowStatus): Active
Next Scheduled Start Time: Start Time already passed
Life (seconds): 1200
Entry Ageout (seconds): never
```

The following example shows the details of the scheduled multiple IP SLAs operation using the **show ip sla configuration** command. The last line in the example indicates that the IP SLAs operations are multiple scheduled (TRUE).

```

Device# show ip sla configuration 1
Entry number: 1
Owner:
Tag:
Type of operation to perform: udpEcho
Target address: 10.2.31.121
Source address: 0.0.0.0
Target port: 9001
Source port: 0
Request size (ARR data portion): 16
Operation timeout (milliseconds): 5000
Type Of Service parameters: 0x0
Verify data: No
Data pattern:
Vrf Name:
Control Packets: enabled
Operation frequency (seconds): 60
Next Scheduled Start Time: Start Time already passed
Life (seconds): 1200
Entry Ageout (seconds): never
Recurring (Starting Everyday): FALSE
Status of entry (SNMP RowStatus): Active
Threshold (milliseconds): 5000
Number of statistic hours kept: 2
Number of statistic distribution buckets kept: 1
Statistic distribution interval (milliseconds): 20
Enhanced History:
Number of history Lives kept: 0
Number of history Buckets kept: 15
History Filter Type: N
Group Scheduled : TRUE

```

The following example shows the latest operation start time of the scheduled multiple IP SLAs operation, when the operations are scheduled at equal intervals, using the show ip sla statistics command:

```

Device# show ip sla statistics | include Latest operation start time
Latest operation start time: *03:06:21.760 UTC Tue Oct 21 2003
Latest operation start time: *03:06:24.754 UTC Tue Oct 21 2003
Latest operation start time: *03:06:27.751 UTC Tue Oct 21 2003
Latest operation start time: *03:06:30.752 UTC Tue Oct 21 2003
Latest operation start time: *03:06:33.754 UTC Tue Oct 21 2003
Latest operation start time: *03:06:36.755 UTC Tue Oct 21 2003
Latest operation start time: *03:06:39.752 UTC Tue Oct 21 2003
Latest operation start time: *03:06:42.753 UTC Tue Oct 21 2003
Latest operation start time: *03:06:45.755 UTC Tue Oct 21 2003
Latest operation start time: *03:06:48.752 UTC Tue Oct 21 2003
Latest operation start time: *03:06:51.753 UTC Tue Oct 21 2003
Latest operation start time: *03:06:54.755 UTC Tue Oct 21 2003
Latest operation start time: *03:06:57.752 UTC Tue Oct 21 2003
Latest operation start time: *03:07:00.753 UTC Tue Oct 21 2003
Latest operation start time: *03:07:03.754 UTC Tue Oct 21 2003
Latest operation start time: *03:07:06.752 UTC Tue Oct 21 2003
Latest operation start time: *03:07:09.752 UTC Tue Oct 21 2003
Latest operation start time: *03:07:12.753 UTC Tue Oct 21 2003
Latest operation start time: *03:07:15.755 UTC Tue Oct 21 2003
Latest operation start time: *03:07:18.752 UTC Tue Oct 21 2003

```

Verify IP SLAs multiple operation scheduler

Command	Purpose
show ip sla statistics	Displays the IP SLAs operation details.
show ip sla group schedule	Displays the IP SLAs group schedule details.
show ip sla configuration	Displays the IP SLAs configuration details.