DYNACORD

PROMATRIX 9000

Public Address and Voice Alarm System

en Events manual

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1 Safety and security information

1.1 Use of latest software

Before using the software application for the first time, make sure that you are running the most current software release. For consistent functionality, compatibility, performance, and security, regularly update the software throughout the operational life of the software application. Follow the instructions in the product documentation regarding software installation and updates.
The following links provide more information:

- General information: https://dynacord.com/support/product-security/
- Security advisories, that is a list of identified vulnerabilities and proposed solutions: https://www.boschsecurity.com/xc/en/support/product-security/security-advisories.html

Dynacord assumes no liability whatsoever for any damage caused by operating its products with outdated software components.

2 Introduction

The event messages that the PROMATRIX 9000 system generates are divided in three different groups:

Type	Description	Storage
Fault events, page 10	Fault events contain information about faults and errors that occur in the PROMATRIX 9000 system or on a system device. For example, an overload of an amplifier output or the malfunctioning of a device.	Maximum of 2000 events. Once the maximum is reached, only the events **Resolved** or **Reset** are removed. In theory, the oldest events can remain depending on their state. Refer to *Fault events status, page 8*.
Call events, page 44	Call events contain information about calls and announcements made in the PROMATRIX 9000 system. For example, the start of a call or of an announcement.	Maximum of 2000 events. The oldest events are removed from the non-volatile memory to free space for the new events.
General events, page 47	General events contain information about special situations. For example, the connection of a device to the PROMATRIX 9000 system.	Maximum of 2000 events. The oldest events are removed from the non-volatile memory to free space for the new events.

Events storage and viewing

- The system controller logs and stores up to 6000 events, 2000 events per type. Refer to the table above for details on the events storage for the system controller.
- The Logging Server collects all events from the system controller, which makes them visible through the Logging Viewer. The Logging Server stores more events than the system controller. As such, events removed from the system controller can be found in the Logging Server as long as the Logging Server is connected to the system controller before the removal.
- Through the Open Interface, 3rd party applications collect the events stored in the system controller.
- Up to 15 fault events appear in the call station display when the **Fault log** function is enabled.

Notice!

If the function **Clear event logging on restart** is enabled, all events stored in the system controller are erased after the restart of the system controller. The events stored in the Logging Server are not affected.

2.1 Event information

Event messages

You can find the following information on an event message in the Logging Viewer:

- The type of event, for instance, *Call Start*. The names of the events in the Logging Viewer and in the call station display differ from the names that show in the Open Interface.
- The date and time on which the event occurred.
- The event originator. The originator is the device where the event occurred. Depending on the device and availability of the information, you can see:
  - **Device**: Device name.
  - **Control input**: Input contact name.

  - **Audio input**: Input contact name.
  - **Audio output**: Input contact name.
  - **Open Interface**: IP-address or TCP/IP device name, name of the user.
  - **Call station** with authentication enabled: user ID.
- **Extra Information** based on event type.
- Specifically for **Fault** events, you can also see the event status information. Refer to *Fault events status, page 8* for more details.

Event details

This manual gives, when available, the following information:

- The name of the event in the **Call station / Logging viewer**.
- The name of the event in the **Open Interface**.
- **Group**: Describes the group of the event: *Fault events, page 10*, *Call events, page 44* and *General events, page 47*.
- **Occurrence:** Describes in which cases the event can occur.
- **Originator**: Describes in which devices the event can occur.
- **ResolveResolve**: Describes under which circumstances the event is resolved.
- **Extra Information:** Describes any relevant extra information also available in the Logging Viewer.
- **Note:** Describes, when applicable, any special properties of the event.

- For **Fault** events:
  - **Recommended action**: Describes what the user can do to solve the fault.
  - **Aggregate to zone fault:** For only some events, if the audio is disrupted in the entirety or in part of a zone, a corresponding *Zone line fault, page 19* is also triggered.

2.1.1 Fault events status

Each fault event has a status:

Status	Description
New	When a fault event occurs, it is a **New** fault event. Events can occur at any moment in an operational system on devices that are enabled in the configuration, unless specified otherwise. When a fault event is new, all fault outputs are activated*.
Acknowledged	The new event is **Acknowledged**. It is possible to acknowledge one or all new events. An event can only be acknowledged once. If all faults in the system are acknowledged, all **Fault alarm buzzer** outputs are deactivated*.
Resolved	The **Acknowledged** fault event is **Resolved**. Most fault events are automatically resolved when the error situation that triggered the event is no longer present in the system. However, some fault events, such as the overload of an amplifier, need to be resolved manually. An event can only be resolved once. If the fault is still present, a **New** fault event is created again.
Reset	The **Resolved** fault event is **Reset**. It is possible to reset one or all events that are resolved. An event can only be reset once. If all faults in the system are reset, all **Fault alarm indicator** outputs are deactivated*. **Note**: Some faults can only be **Resolved** through a **Reset**.

Status	Description
	*Fault output: A control output that was configured as a Fault alarm buzzer or as a Fault alarm indicator.

Events that need to be manually resolved are resolved using the Reset so the statement that only resolved faults can be reset is not quite correct.

Notice!
Fault events that require a manual resolve and that are not yet in the **Resolved** or **Reset** status are not removed. If all 2000 event faults are of this type and not yet resolved or reset, typically the oldest fault event is removed.
If the oldest event cannot be removed, the new event faults are not added to the queue.

Acknowledge and reset fault events

All **New** fault events can be acknowledged and reset through:

- A button of a call station extension.
- The control inputs of, for example, a multifunction power supply or a control interface module.
- The call station user interface when the **Fault log** tile is enabled.
- The Logging Application that uses the Open Interface.

To acknowledge or reset fault events individually, use the Open Interface.

3 Fault events

The following table shows an overview of the events with type **Fault** and their possible originators:

Fault event as it appears in the call stations	Originators
24V supply fault: output A/B, page 28	PM9-MPS3
48V supply fault: output 1/2/3A/B, page 28	PM9-MPS3
Amplifier channel fault, page 36	PM9-AD604 PM9-AD608
Amplifier channel fault: spare, page 36	PM9-AD604 PM9-AD608
Audio delay fault, page 36	PM9-AD604 PM9-AD608
Audio path fault, page 15	PM9-CSLD PM9-CSLW PRA-CSBK
Battery fault: battery disconnected (charger function disabled), page 31	PM9-MPS3
Battery fault: impedance too high, page 29	PM9-MPS3
Battery fault: leakage current too high (charger function disabled), page 32	PM9-MPS3
Battery fault: short circuit (charger function disabled), page 32	PM9-MPS3
Battery fault: temperature out of range (charger function disabled), page 32	PM9-MPS3
Battery fault: voltage too high (charger function disabled), page 33	PM9-MPS3
Battery fault: voltage too low, page 29	PM9-MPS3
Battery power converter fault: output 1/2/3, page 29	PM9-MPS3
Charger defect (charger function lost), page 33	PM9-MPS3
Configuration file error, page 21	PM9-SCL PM9-SCS
Configuration file version mismatch, page 21	PM9-SCL PM9-SCS
Control input line failure, page 20	PM9-MPS3 PRA-IM16C8 PRA-IM2A2
Control output line failure, page 41	PRA-IM16C8
End of branch fault: output A/B, page 37	PM9-AD604 PM9-AD608

End of line fault: output A/B, page 37	PM9-AD604 PM9-AD608
Extension mismatch, page 27	PM9-CSLD PM9-CSLW PRA-CSBK
External fault, page 15	PM9-MPS3 PRA-IM16C8 PRA-IM2A2
Fan rotation fault: fan 1/2, page 15	PM9-AD604 PM9-AD608 PM9-MPS3
Ground fault, page 16	PM9-AD604 PM9-AD608 PRA-IM16C8
Incompatible firmware, page 14	All devices
Incorrect number of stacked switches, page 42	Cisco IE-5000 Cisco IE-9320
Insufficient license fault, page 23	PM9-SCL PM9-SCS
Internal communication fault, page 31	PM9-MPS3
Internal power fault, page 16	PM9-MPS3 PRA-IM2A2
Lifeline audio fault: output 1/2/3, page 30	PM9-MPS3
Lifeline supply fault: output 1/2/3, page 30	PM9-MPS3
Mains supply fault: external, page 16	PM9-MPS3 PRA-IM16C8 PRA-IM2A2
Mains supply fault: mains disconnected (charger function lost), page 34	PM9-MPS3
Mains power converter fault: charger (charger function lost), page 34	PM9-MPS3
Mains power converter fault: charger voltage too low (charger function lost), page 34	PM9-MPS3
Mains power converter fault: output 1/2/3, page 30	PM9-MPS3
Media clock fault, page 17	All devices except PRA-ANS, PRA-IM16C8, PRA-WCP-EU, PRA-WCP-US
Message corrupt, page 22	PM9-SCL PM9-SCS

Message missing, page 22	PM9-SCL PM9-SCS
Microphone failure, page 27	PM9-CSLD PM9-CSLW PRA-CSBK
Network fault, page 17	All devices, except PRA-ANS, PRA-WCP-EU and PRA-WCP-US
Network latency fault, page 18	All devices except PRA-ANS, PRA-IM16C8, PRA-WCP-EU, PRA-WCP-US
No valid configuration file found; a new configuration file will be created, page 21	PM9-SCL PM9-SCS
Output overload fault, page 38	PM9-AD604 PM9-AD608
PoE supply failure, page 20	PRA-IM16C8 PRA-IM2A2 PM9-CSLD PM9-CSLW PRA-CSBK
Power converter fault: amplifier section, page 39	PM9-AD604 PM9-AD608
Power converter fault: controller section, page 39	PM9-AD604 PM9-AD608
Power supply fault, page 42	Cisco IE-5000 Cisco IE-9320
Power supply fault: input A/B, page 18	PM9-SCL PM9-SCS PRA-ES8P2S PRA-ES8E8S
Power supply fault: input A/B, page 38	PM9-AD604 PM9-AD608
Power supply fault: lifeline, page 38	PM9-AD604 PM9-AD608
Processor reset, page 19	PM9-SCL PM9-SCS PM9-AD604 PM9-AD608 PM9-MPS3 PRA-IM16C8 PRA-IM2A2 PM9-CSLD PM9-CSLW PRA-CSBK

Remote audio output configuration fault, page 24	Remote output
Remote audio output fault, page 24	Remote output
Remote audio output loop fault, page 24	Remote output
Redundant data path fault, page 42	Cisco IE-5000 Cisco IE-9320
Remote backup power fault, page 25	PM9-SCL PM9-SCS
Remote fault, page 25	PM9-SCL PM9-SCS
Remote ground fault, page 25	PM9-SCL PM9-SCS
Remote main power fault, page 26	PM9-SCL PM9-SCS
Remote system fault, page 26	PM9-SCL PM9-SCS
Short circuit fault: output A/B, page 39	PM9-AD604 PM9-AD608
Synchronization fault, page 22	PM9-SCL PM9-SCS
Temperature too high, page 40	PM9-AD604 PM9-AD608
Unit missing, page 14	All devices
Zone line fault, page 19	PM9-MPS3 PRA-IM16C8 PRA-IM2A2

3.1 All device events

All device events can occur in every single device in the system, with the originator available. These events do not occur in Open Interface clients.

3.1.1 Incompatible firmware

In the **Call station** and **Logging Viewer**, this event appears as:

– Incompatible firmware

In the **Open interface**, this event appears as:

– IncompatibleFirmware

Group: Fault Events
Occurrence: Logs a mismatch between the software version of a device and the expected software version.
Originator: The device with the invalid software version.
Resolve: When the device with the fault is upgraded to the expected software version.
Extra Information:

– The current software version of the device.
– The expected software version.

Aggregate to zone fault: Yes.

Note: This event is not generated by the Open interface client.

Recommended action:

– Update all devices to the same firmware.

3.1.2 Unit missing

In the **Call station** and **Logging Viewer**, this event appears as:

– Unit missing

In the **Open interface**, this event appears as:

– UnitMissing

Group: Fault Events
Occurrence: Logs the absence of a device configured in the software.
Originator: The device that is missing.
Resolve: When the missing device reconnects.
Aggregate to zone fault: Yes.

Note:
Devices are only reported missing:

– Two minutes after a regular system controller starts.
– For ARNI-based systems, five minutes after a system controller starts.
– For Open Interface clients, ten minutes after a system controller starts.
  – For Open Interface clients, only when connection supervision is enabled in the configuration.

Recommended action:

– Check the affected device and its connections.

3.2 Device events

Device events can occur in multiple devices but not all devices.
They can occur in:

- The system controllers, PM9-SCL and PM9-SCS.
- The power amplifiers, PM9-AD604 and PM9-AD608.
- The multifunction power supply, PM9-MPS3.
- The call stations, PM9-CSLD, PM9-CSLW and PRA-CSBK.
- The interface modules, PRA-IM16C8 and PRA-IM2A2.
- The network switches, PRA-ES8P2S and PRA-ES8E8S.

3.2.1 Audio path fault

In the **Call station** and **Logging Viewer**, this event appears as:

- Audio path fault

In the **Open interface**, this event appears as:

- AudioPathSupervision

Group: Fault Events
Occurrence: Logs the failure of the audio path in a device.
Originator: The audio input with the fault.
Resolve: When the fault is resolved manually.

Recommended actions:

- If the fault is in a call station, contact Technical Support for help.
- If the fault is in an audio interface module, check the audio input connection.

3.2.2 External fault

In the **Call station** and **Logging Viewer**, this event appears as:

- External fault

In the **Open interface**, this event appears as:

- UserInjectedFault

Group: Fault Events
Occurrence: Logs the activation of a fault input by a user or a remote system
Originator: The control input or the Open Interface client from where the user activated the fault.
Resolve:

- When the input is deactivated, in case the event occurs on a device.
- When the Open Interface client reports the event is resolved, in case the event occurs on an Open Interface client.

Extra Information:

- The description of the error as configured by the user.
-

Recommended action:

- Check the affected input to find out why the system reports the fault.

3.2.3 Fan rotation fault: fan 1/2

In the **Call station** and **Logging Viewer**, these events appear as:

- Fan rotation fault: fan 1

– Fan rotation fault: fan 2

In the **Open interface**, these events appear as:
– Fan1Fault
– Fan2Fault

Group: Fault Events
Occurrence: Logs a fault in the fan 1 or the fan 2 of a device.
Originator: The device with the fan fault.
Resolve: When the fault is no longer present.

Recommended actions:
– Contact Technical Support for help.

3.2.4 Ground fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Ground fault

In the **Open interface**, this event appears as:
– GroundShortFault

Group: Fault Events
Occurrence: Logs a ground fault in a device in the PROMATRIX 9000 system.
Originator: The device with the ground short fault.
Resolve: When the fault is no longer present.

Recommended action:
– Check the affected device and its connections.

3.2.5 Internal power fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Internal power fault

In the **Open interface**, this event appears as:
– InternalPowerFault

Group: Fault Events
Occurrence: Logs that one of the voltages of the internal power lines is out of bounds.
Originator: The device with the power lines out of bounds.
Resolve: Only when the board is replaced.

Recommended action:
– Contact Technical Support for help.

3.2.6 Mains supply fault: external

In the **Call station** and **Logging Viewer**, this event appears as:
– Mains supply fault: external

In the **Open interface**, this event appears as:

– ExternalPowerFault

Group: Fault Events
Occurrence: Logs the trigger of a control input configured as backup power mode.
Originator: The triggered control input.
Resolve: When the backup power mode state turns off.

Note: This fault aborts all calls under the configured priority.

Recommended action:
– Check the mains power supply.

3.2.7 Media clock fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Media clock fault

In the **Open interface**, this event appears as:
– MediaClockFault

Group: Fault Events
Occurrence: Logs that a device does not adapt to the Precision Time Protocol (PTP) in place in the network for over 60 seconds.
Originator: The device with the unsynchronized clock.
Resolve: When the device clock synchronizes.

Note:
The system controller supervises the audio clock with PTP. PTP synchronizes the clocks as needed for the playback of media. The synchronization can be disturbed:
– By a single faulty clock anywhere in the network.
– By a bad network infrastructure.

Recommended action:
– Check the network infrastructure.

3.2.8 Network fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Network fault

In the **Open interface**, this event appears as:
– NetworkChange

Group: Fault Events
Occurrence: Logs a network neighbor missing for each configured and operable device.
Originator: The device with the missing network neighbor.
Resolve: When the network neighbor is present again.
Extra Information:
– The information displayed for each network neighbor:
  – The local system name
  – The local port ID

- The remote system name, and
- The remote port ID.

Note:

- To supervise the network, capture a network snapshot in **Network supervision**. Network snapshots are only possible with **Network supervision** disabled.
- **Save the configuration** to make the network snapshot persistent. It is not necessary to **Save and restart**.
- Enable **Network supervision** with the network snapshot available.

Any network fault only appears after two minutes.

Recommended action:

- Compare the network infrastructure with a network snapshot to discover where the problem is.

3.2.9 Network latency fault

In the **Call station** and **Logging Viewer**, this event appears as:

- Network latency fault

In the **Open interface**, this event appears as:

- NetworkLatencyFault

Group: Fault Events
Occurrence: Logs that a network delay interrupted the audio flow.
Originator: The output with the latency fault.
Resolve: When the network delay is no longer present.
Extra Information:

- For amplifiers only, this fault appears as **Severity: High** and is **Aggregated to zone fault**.

Recommended action:

- Check the network infrastructure.

3.2.10 Power supply fault: input A/B

In the **Call station** and **Logging Viewer**, these events appear as:

- Power supply fault: input A
- Power supply fault: input B

In the **Open interface**, these events appear as:

- PowerSupplyAFault
- PowerSupplyBFault

Group: Fault Events
Occurrence: Logs the failure of the inputs A and/or B. Only occurs when **Supervision** is enabled for the inputs A/B.
Originator: A system controller or a PROMATRIX 9000 network switch.
Resolve: When the fault is no longer present.

Recommended action:

- Check the affected device and its connections.

3.2.11 Processor reset

In the **Call station** and **Logging Viewer**, this event appears as:

– Processor reset

In the **Open interface**, this event appears as:

– UnitResetFault

Group: Fault Events

Occurrence: Logs the watchdog reset of a processor in a device. This event is generated only when the device starts.

Originator: The reset device.

Resolve: Immediately after acknowledgment.

Extra Information:

– The processor that is the cause of the reset. The possibilities are as follows:

Device	Processor appears as
Call station Multifunction power supply Audio interface module	Network processor
Call station Multifunction power supply Amplifier Control interface module Audio interface module	Application processor
Call station	GUI processor
	Extension processor n, with “n” as the number of the extension starting with 1
System controller Amplifier	Network processor
System controller	CPU
Amplifier	Audio processor
	Power supply processor 1
	Power supply processor 2

Note: This event is not generated by the Open interface client.

Recommended action:

– Check for switching loops or other causes of broadcast storms.

– Contact Technical Support for help.

3.2.12 Zone line fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Zone line fault

In the **Open interface**, this event appears as:

– ZoneLineFault

Group: Fault Events
Occurrence: Logs the activation of a zone line fault on an input configured for this purpose.
Originator: The control input with the fault.
Resolve: When the input is deactivated.
Extra Information:
– The names of the zones.
Aggregate to zone fault: Yes.

Recommended action:
– Check the 100 V audio lines.

3.2.13 Control input line failure

In the **Call station** and **Logging Viewer**, this event appears as:
– Control input line failure

In the **Open interface**, this event appears as:
– ControlInputLineFault

Group: Fault Events
Occurrence: Logs a failure in a supervised input contact on a device.
Originator: The control input that failed.
Resolve: When the fault is no longer present.

Recommended action:
– Check the affected input and its connections.

3.2.14 PoE supply failure

In the **Call station** and **Logging Viewer**, this event appears as:
– PoE supply failure

In the **Open interface**, this event appears as:
– PoESupplyFault

Group: Fault Events
Occurrence: Logs the failure of the backup power supply of the device. Only occurs when the number of connected PoE inputs is less than the configured expected PoE inputs.
Originator: The device with the PoE supply fault.
Resolve: When the fault is no longer present.

Recommended action:
– Check the affected input.

3.3 System controller events

System controller events can only occur in the PM9-SCL and PM9-SCS.

3.3.1 Configuration file error

In the **Call station** and **Logging Viewer**, this event appears as:

– Configuration file error

In the **Open interface**, this event appears as:

– IllegalConfiguration

Group: Fault Events
Occurrence: Logs a corruption error or a consistency error in the configuration. When occurring at start-up, a default configuration is loaded instead.
Originator: The system controller with the fault.
Resolve: Immediately after acknowledgment.

Recommended action:

– Restore a previous backup with the correct configuration file.

3.3.2 Configuration file version mismatch

In the **Call station** and **Logging Viewer**, this event appears as:

– Configuration file version mismatch

In the **Open interface**, this event appears as:

– ConfigurationVersion

Group: Fault Events
Occurrence: Logs a mismatch between the version number of the configuration file and the version number of the configuration file the software expects. When occurring at start-up, a default configuration is loaded instead.
Originator: The system controller with the fault.
Resolve: Immediately after acknowledgment.
Extra Information:

– The version of the configuration file.
– The version of the configuration file that the software expects.

Recommended action:

– Restore a previous backup with the correct configuration file.

3.3.3 No valid configuration file found; a new configuration file will be created

In the **Call station** and **Logging Viewer**, this event appears as:

– No valid configuration found; a new configuration file will be created

In the **Open interface**, this event appears as:

– ConfigurationFile

Group: Fault Events
Occurrence: Logs the absence of the configuration file. When occurring at start-up, a default configuration is loaded instead.

Originator: The system controller with the fault.
Resolve: Immediately after acknowledgment.

Recommended action:
– Restore a previous backup with the correct configuration file.

3.3.4 Message missing

In the **Call station** and **Logging Viewer**, this event appears as:
– Message missing

In the **Open interface**, this event appears as:
– PrerecordedMessagesNames

Group: Fault Events
Occurrence: Logs the mismatch between the configured messages and the detected messages.
Originator: The system controller with the fault.
Resolve: When the fault is no longer present.
Extra Information:
– The names of the messages in the configuration but not detected.

Recommended action:
– Upload the correct messages.

3.3.5 Message corrupt

In the **Call station** and **Logging Viewer**, this event appears as:
– Message corrupt

In the **Open interface**, this event appears as:
– PrerecordedMessagesCorrupt

Group: Fault Events
Occurrence: Logs the corruption of one or more prerecorded messages in the system, which can no longer be used.
Originator: The system controller with the fault.
Resolve: When the fault is no longer present.
Extra Information:
– The names of the corrupted messages.

Recommended action:
1. Delete the corrupted messages.
2. Upload the correct messages.

3.3.6 Synchronization fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Synchronization fault

In the **Open interface**, this event appears as:
– SynchronizationFault

Group: Fault Events
Occurrence: Logs the failure to synchronize between a duty and a standby controller in a redundant system.
Originator: The duty controller.
Resolve: When the synchronization no longer fails.

Recommended action:
– Check the network infrastructure.
– Contact Technical Support for help.

3.3.7 Insufficient license fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Insufficient license fault

In the **Open interface**, this event appears as:
– LicenseFault

Group: Fault Events
Occurrence: Logs that configured functionalities require a license that is not available in the system.
Originator: The system controller with the fault.
Resolve: When the system controller starts with enough licenses.
Extra Information:
– The name of the insufficient license type.

Recommended action:
– Add the necessary licenses to the system controller.

3.4 Remote system device events

Remote system device events can only occur in devices connected in a remote system. These faults are reported by the system controller of the remote system but can happen in multiple devices in the remote system.
Refer to the system controller of the remote system to check what is the specific fault.

3.4.1 Remote audio output fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Remote audio output fault

In the **Open interface**, this event appears as:
– RemoteOutputFault

Group: Fault Events
Occurrence: Logs the failure of an audio output in a remote system.
Originator: The remote output with the fault.
Resolve: When the fault is no longer present.
Extra Information: **Severity: High**
Aggregate to zone fault: Always.

Recommended action:
– Check the remote system affected by the fault.

3.4.2 Remote audio output configuration fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Remote audio output configuration fault

In the **Open interface**, this event appears as:
– RemoteOutputConfigurationFault

Group: Fault Events
Occurrence: Logs that an invalid name for the remote zone group is configured for the remote audio output.
Originator: The remote output with the fault.
Resolve: When the fault is no longer present.
Extra Information: The name of the remote zone group.

Recommended action:
– Check the system controller that reported the fault.
– Check the configuration of the remote system affected by the fault.

3.4.3 Remote audio output loop fault

In the **Call station** and **Logging Viewer**, this event appears as:
– Remote audio output loop fault

In the **Open interface**, this event appears as:
– RemoteOutputLoopFault

Group: Fault Events

Occurrence: Logs the detection of a loop for a remote audio output. In this case, a loop is defined as follows:
- A remote audio output is linked to a zone group on a system controller
- That same system controller has remote audio outputs
- These remote audio outputs are linked to one or more zone groups
- These zone groups are located on the originating system controller.

Originator: The remote output with the fault.
Resolve: When the fault is no longer present.
Extra Information: The name of the remote zone group.

Recommended action:
- Check the system controller that reported the fault.
- Check the configuration of the remote system affected by the fault.

3.4.4 Remote backup power fault

In the **Call station** and **Logging Viewer**, this event appears as:
- Remote backup power fault

In the **Open interface**, this event appears as:
- RemoteBackupPowerFault

Group: Fault Events
Occurrence: Logs a backup power fault in a remote system.
Originator: The remote system device with the fault.
Resolve: When the fault is no longer present.

Recommended action:
- Check the remote system affected by the fault.

3.4.5 Remote fault

In the **Call station** and **Logging Viewer**, this event appears as:
- Remote fault

In the **Open interface**, this event appears as:
- RemoteFault

Group: Fault Events
Occurrence: Logs a fault in a remote system.
Originator: The remote system device with the fault.
Resolve: When the fault is no longer present.

Recommended action:
- Check the remote system affected by the fault.

3.4.6 Remote ground fault

In the **Call station** and **Logging Viewer**, this event appears as:
- Remote ground fault

In the **Open interface**, this event appears as:

– RemoteGroundFault

Group: Fault Events
Occurrence: Logs a ground fault in a remote system.
Originator: The remote system device with the fault.
Resolve: When the fault is no longer present.

Recommended action:

– Check the remote system affected by the fault.

3.4.7 Remote main power fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Remote main power fault

In the **Open interface**, this event appears as:

– RemoteMainPowerFault

Group: Fault Events
Occurrence: Logs a main power fault in a remote system.
Originator: The remote system device with the fault.
Resolve: When the fault is no longer present.

Recommended action:

– Check the remote system affected by the fault.

3.4.8 Remote system fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Remote system fault

In the **Open interface**, this event appears as:

– RemoteSystemFault

Group: Fault Events
Occurrence: Logs a system fault in a remote system.
Originator: The remote system device with the fault.
Resolve: When the fault is no longer present.

Recommended action:

– Check the remote system affected by the fault.

3.5 Call station events

Call station events can only occur in the PM9-CSLD, PM9-CSLW and PRA-CSBK.

3.5.1 Extension mismatch

In the **Call station** and **Logging Viewer**, this event appears as:

– Extension mismatch

In the **Open interface**, this event appears as:

– CallStationExtension

Group: Fault Events
Occurrence: Logs a mismatch between the number of configured extensions and the number of detected extensions connected to a call station.
Originator: The call station with the fault.
Resolve: When the fault is no longer present.
Extra Information:

– The number of configured extensions.
– The number of detected extensions by the system.

Recommended actions:

– Check the number of connected extensions.
– Check the configuration of the call stations.
– Check the loop-through connections of each extension.
– Check that each extension works correctly.

3.5.2 Microphone failure

In the **Call station** and **Logging Viewer**, this event appears as:

– Microphone failure

In the **Open interface**, this event appears as:

– MicrophoneSupervision

Group: Fault Events
Occurrence: Logs the failure of a microphone located on or connected to a device.
Originator: The call station with the fault.
Resolve: When the fault is no longer present.

Recommended actions:

– Contact Technical Support for help.

3.6 Multifunction power supply events

Multifunction power supply events can only occur in the PM9-MPS3.

3.6.1 24V supply fault: output A/B

In the **Call station** and **Logging Viewer**, these events appear as:

- 24V supply fault: output A
- 24V supply fault: output B

In the **Open interface**, these events appear as:

- DcAux1Fault
- DcAux2Fault

Group: Fault Events
Occurrence: Logs the failure of the 24 V DC auxiliary power supply in the output A and/or B.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended actions:

- Contact Technical Support for help.

3.6.2 48V supply fault: output 1/2/3A/B

In the **Call station** and **Logging Viewer**, these events appear as:

- 48V supply fault: output 1A
- 48V supply fault: output 1B
- 48V supply fault: output 2A
- 48V supply fault: output 2B
- 48V supply fault: output 3A
- 48V supply fault: output 3B

In the **Open interface**, these events appear as:

- DcOut1PSU1Fault
- DcOut2PSU1Fault
- DcOut1PSU2Fault
- DcOut2PSU2Fault
- DcOut1PSU3Fault
- DcOut2PSU3Fault

Group: Fault Events
Occurrence: Logs a missing 48 V output for following outputs:

- 1A and/or 1B.
- 2A and/or 2B.
- 3A and/or 3B.

Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended action:

- Contact Technical Support for help.

3.6.3 Battery power converter fault: output 1/2/3

In the **Call station** and **Logging Viewer**, these events appear as:

– Battery power converter fault: output 1
– Battery power converter fault: output 2
– Battery power converter fault: output 3

In the **Open interface**, these events appear as:

– BackupAbsentPSU1Fault
– BackupAbsentPSU2Fault
– BackupAbsentPSU3Fault

Group: Fault Events
Occurrence: Logs the failure of the battery power supply for outputs 1, 2 and/or 3.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended action:

– Contact Technical Support for help.

3.6.4 Battery fault: impedance too high

In the **Call station** and **Logging Viewer**, this event appears as:

– Battery fault: impedance too high

In the **Open interface**, this event appears as:

– BatteryRiFault

Group: Fault Events
Occurrence: Logs an input resistance fault for the connected battery of the multifunction power supply. The reporting of the failure depends on the configured battery capacity.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended action:

– Contact Technical Support for help.

3.6.5 Battery fault: voltage too low

In the **Call station** and **Logging Viewer**, this event appears as:

– Battery fault: voltage too low

In the **Open interface**, this event appears as:

– BatteryUndervoltageFault

Group: Fault Events
Occurrence: Logs the undervoltage of the battery mains power. The battery is too low to work.
Originator: The multifunction power supply with the fault.
Resolve: When the mains power recovers.

Recommended action:

– Charge the battery.

3.6.6 Mains power converter fault: output 1/2/3

In the **Call station** and **Logging Viewer**, these events appear as:

- Mains power converter fault: output 1
- Mains power converter fault: output 2
- Mains power converter fault: output 3

In the **Open interface**, these events appear as:

- MainsAbsentPSU1Fault
- MainsAbsentPSU2Fault
- MainsAbsentPSU3Fault

Group: Fault Events
Occurrence: Logs the failure of the mains power supply for outputs 1, 2 and/or 3.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended action:

- Contact Technical Support for help.

3.6.7 Lifeline supply fault: output 1/2/3

In the **Call station** and **Logging Viewer**, these events appear as:

- Lifeline supply fault: output 1
- Lifeline supply fault: output 2
- Lifeline supply fault: output 3

In the **Open interface**, these events appear as:

- AccSupplyPSU1Fault
- AccSupplyPSU2Fault
- AccSupplyPSU3Fault

Group: Fault Events
Occurrence: Logs the failure of the ACC power supply in the output 1, 2 and/or 3 connected to the amplifier.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended action:

- Check the affected output and its connections.

3.6.8 Lifeline audio fault: output 1/2/3

In the **Call station** and **Logging Viewer**, these events appear as:

- Lifeline audio fault: output 1
- Lifeline audio fault: output 2
- Lifeline audio fault: output 3

In the **Open interface**, these events appear as:

- AudioLifelinePSU1Fault
- AudioLifelinePSU2Fault
- AudioLifelinePSU3Fault

Group: Fault Events
Occurrence: Logs the failure of the ACC wiring in the output 1, 2 and/or 3 connected to the amplifier. This connection is supervised by the multifunction power supply.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Recommended action:
- Check the multifunction power supply lifeline, audio lines and connections.
- Check the amplifier lifeline, audio lines and connections.

3.6.9 Internal communication fault

In the **Call station** and **Logging Viewer**, this event appears as:
- Internal communication fault

In the **Open interface**, this event appears as:
- InternalCommunicationFault

Group: Fault Events
Occurrence: Logs the failure of one or multiple boards in the multifunction power supply.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.
Extra Information:
- A list of the unresponsive boards.

Recommended action:
- Contact Technical Support for help.

3.7 Multifunction power supply events - charger function

Multifunction power supply events can only occur in the PM9-MPS3. The following events cause the charger function to be lost or disabled.

3.7.1 Battery fault: battery disconnected (charger function disabled)

In the **Call station** and **Logging Viewer**, this event appears as:
- Battery fault: battery disconnected (charger function disabled)

In the **Open interface**, this event appears as:
- PowerBackupSupplyFault

Group: Fault Events
Occurrence: Logs the failure of the backup power supply.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.
Note: The charger function is suspended while this fault is active.

Recommended action:
- Check the connection between the device and the battery.

3.7.2 Battery fault: short circuit (charger function disabled)

In the **Call station** and **Logging Viewer**, this event appears as:

– Battery fault: short circuit (charger function disabled)

In the **Open interface**, this event appears as:

– BatteryShortFault

Group: Fault Events

Occurrence: Logs a fault in the connection between the battery and the multifunction power supply due to a short circuit.

Originator: The multifunction power supply with the fault.

Resolve: When the fault is no longer present.

Note: The charger function is suspended while this fault is active.

Recommended actions:

– Check the battery condition and connections.

– Replace the battery, if required.

3.7.3 Battery fault: temperature out of range (charger function disabled)

In the **Call station** and **Logging Viewer**, this event appears as:

– Battery fault: temperature out of range (charger function disabled)

In the **Open interface**, this event appears as:

– BatteryOverheatFault

Group: Fault Events

Occurrence: Logs that the temperature of the connected battery of the multifunction power supply is not within the correct working range or logs the failure of a temperature sensor.

Originator: The multifunction power supply with the fault.

Resolve: When the fault is no longer present.

Note: The charger function is suspended while this fault is active.

Recommended actions:

– Check if the battery load is within the specifications.

– Check for short circuits.

– Check the battery condition and connections.

– Replace the battery, if required.

3.7.4 Battery fault: leakage current too high (charger function disabled)

In the **Call station** and **Logging Viewer**, this event appears as:

– Battery fault: leakage current too high (charger function disabled)

In the **Open interface**, this event appears as:

– BatteryFloatChargeFault

Group: Fault Events

Occurrence: Logs the failure of the battery float charge. This fault can only occur:

– During charger float mode, after spending one hour with more than 1 A of charging current. This can happen with a defected battery when the leakage current is too high or when the battery has additional load.
– When charging for longer than 73 hours with more than 1 A. This does not happen with a good battery of up to 230 Ah, which are typically charged within 48 hours (90% in the first 24 hours).

Originator: The multifunction power supply with the fault.
Resolve: When the battery is disconnected and reconnected after going through the recommended actions or when the battery is replaced.
Note: The charger function is suspended while this fault is active.

Recommended actions:
– Check the functionality of the multifunction power supply charger, including the configuration settings.
– Check the battery condition and connections.
– Replace the multifunction power supply and/or battery, if required.
– Measure the charging current during the float mode.
– If an additional load is connected, remove it from the battery.

3.7.5 Battery fault: voltage too high (charger function disabled)

In the **Call station** and **Logging Viewer**, this event appears as:
– Battery fault: voltage too high (charger function disabled)

In the **Open interface**, this event appears as:
– BatteryOvervoltageFault

Group: Fault Events
Occurrence: Logs an overvoltage of the battery of the multifunction power supply.
Originator: The multifunction power supply with the fault.
Resolve: It is not possible to recover from this fault.
Note: The charger function is suspended while this fault is active.

Recommended actions:
1. Disconnect the mains power and the battery.
2. Contact Technical Support for help.

3.7.6 Charger defect (charger function lost)

In the **Call station** and **Logging Viewer**, this event appears as:
– Charger defect (charger function lost)

In the **Open interface**, this event appears as:
– ChargerFault

Group: Fault Events
Occurrence: Logs the failure of the charger.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.
Note: The charger function is suspended while this fault is active.

Recommended action:

– Contact Technical Support for help.

3.7.7 Mains supply fault: mains disconnected (charger function lost)

In the **Call station** and **Logging Viewer**, this event appears as:

– Mains supply fault: mains disconnected (charger function lost)

In the **Open interface**, this event appears as:

– PowerMainsSupplyFault

Group: Fault Events
Occurrence: Logs the loss of the mains power.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.

Note:

– The charger function is suspended while this fault is active.
– When this fault is active, the amplifiers connected to the multifunction power supply with the fault enter backup power mode. As such:
  – Only calls with priority over 224 are routed.
  – The system controller is not aware that the amplifiers entered the standby mode. For that reason, the system controller still indicates that the lower priority calls started successfully. However, the audio from the loudspeakers is not present.

Recommended action:

– Check the mains power supply.

3.7.8 Mains power converter fault: charger (charger function lost)

In the **Call station** and **Logging Viewer**, this event appears as:

– Mains power converter fault: charger (charger function lost)

In the **Open interface**, this event appears as:

– MainsAbsentChargerFault

Group: Fault Events
Occurrence: Logs a defect in the mains converter for the charger, which prevents the battery from charging correctly.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.
Note: The charger function is suspended while this fault is active.

Recommended action:

– Contact Technical Support for help.

3.7.9 Mains power converter fault: charger voltage too low (charger function lost)

In the **Call station** and **Logging Viewer**, this event appears as:

– Mains power converter fault: charger voltage too low (charger function lost)

In the **Open interface**, this event appears as:

– ChargerSupplyVoltageTooLowFault

Group: Fault Events
Occurrence: Logs that the voltage of the charger supply is too low.
Originator: The multifunction power supply with the fault.
Resolve: When the fault is no longer present.
Note: The charger function is suspended while this fault is active.

Recommended action:
– Contact Technical Support for help.

3.8 Amplifier events

Amplifier events can only occur in the PM9-AD604 and PM9-AD608.

3.8.1 Amplifier channel fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Amplifier channel fault

In the **Open interface**, this event appears as:

– AmpChannelFault

Group: Fault Events
Occurrence: Logs an internal fault in an amplifier channel. If the spare channel is available, the spare channel takes over the functionality of the faulty channel. If the spare channel is not available, the **Severity** is **High**.
Originator: The amplifier with the fault.
Extra Information: The **Severity** can be **High** or **Low**.
Aggregate to zone fault: Yes, when **Severity: High.**

Recommended action:

– Contact Technical Support for help.

3.8.2 Amplifier channel fault: spare

In the **Call station** and **Logging Viewer**, this event appears as:

– Amplifier channel fault: spare

In the **Open interface**, this event appears as:

– AmpSpareInternalFault

Group: Fault Events
Occurrence: Logs an internal fault in the spare channel of an amplifier. It is not possible to use the spare channel. If the spare channel must replace an amplifier channel, the **Severity** is **High**.
Originator: The amplifier with the fault.
Extra Information: The **Severity** can be **High** or **Low**.
Aggregate to zone fault: Yes, when **Severity: High.**

Recommended action:

– Contact Technical Support for help.

3.8.3 Audio delay fault

In the **Call station** and **Logging Viewer**, these events appear as:

– Audio delay fault

In the **Open interface**, these events appear as:

– AudioDelayFault

Group: Fault Events
Occurrence: Logs the failure of the audio path through the DDR memory. As a result, the audio might be distorted. This fault only occurs if the audio delay is used.
Originator: The amplifier with the fault.

Extra Information: **Severity: High**
Aggregate to zone fault: Always.

Recommended action:
– Contact Technical Support for help.

3.8.4 End of line fault: output A/B

In the **Call station** and **Logging Viewer**, these events appear as:
– End of line fault: output A
– End of line fault: output B

In the **Open interface**, these events appear as:
– EolFailureLineAFault
– EolFailureLineBFault

Group: Fault Events
Occurrence: Logs a disconnection of the end-of-line device for the amplifier channel on line A or B.
Originator:
– The amplifier with the fault.
– The number of the audio output with the fault.
Resolve: When the fault is no longer present.
Extra Information: The **Severity** can be **High** or **Low**.
Aggregate to zone fault: Yes, when **Severity: High.**

Recommended action:
– Check the end-of-line device, the lines and the connections.

3.8.5 End of branch fault: output A/B

In the **Call station** and **Logging Viewer**, these events appear as:
– End of branch fault: output A
– End of branch fault: output B

In the **Open interface**, these events appear as:
– EoBFailureLineAFault
– EoBFailureLineBFault

Group: Fault Events
Occurrence: Logs a disconnection of the end-of-branch device for the amplifier channel on line A or B.
Originator:
– The amplifier with the fault.
– The number of the audio output with the fault.
– The ID of the end-of-branch device with the fault.
Resolve: When the fault is no longer present.
Extra Information: The **Severity** can be **High** or **Low**.
Aggregate to zone fault: Yes, when **Severity: High.**
Extra Information:
– The ID of the end-of-branch device with the fault.
– The name given to the branch in the configuration interface.

Recommended action:

– Check the end-of-branch device, the lines and the connections.

3.8.6 Output overload fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Output overload fault

In the **Open interface**, this event appears as:

– AmpChannelOverloadFault

Group: Fault Events
Occurrence: Logs an output overload in an amplifier channel.
Originator: The amplifier with the fault.
Extra information: Severity is always **Low**.

Recommended action:

– Decrease the load of the affected amplifier channel.

3.8.7 Power supply fault: lifeline

In the **Call station** and **Logging Viewer**, this event appears as:

– Power supply fault: lifeline

In the **Open interface**, this event appears as:

– AmpAcc18VFault

Group: Fault Events
Occurrence: Logs the failure of the supervision of the 18 V on the ACC connection to the multifunction power supply.
Originator: The amplifier with the fault.
Extra Information: The **Severity** can be **High** or **Low**.

Recommended action:

– Check the lifeline connection between the amplifier and the multifunctional power supply.

3.8.8 Power supply fault: input A/B

In the **Call station** and **Logging Viewer**, these events appear as:

– Power supply fault: input A
– Power supply fault: input B

In the **Open interface**, these events appear as:

– Amp48VAFault
– Amp48VBFault

Group: Fault Events
Occurrence: Logs a fault in the power supply of the input A and/or B of an amplifier. When the fault occurs on both inputs, **Severity** is **High**.
Originator: The amplifier with the fault.
Resolve: When the fault is no longer present.
Extra Information: The **Severity** can be **High** or **Low**.

Aggregate to zone fault: Yes, when **Severity: High.**
Recommended action:
– Check the power and connections of the powering device and of the amplifier.

3.8.9 Short circuit fault: output A/B

In the **Call station** and **Logging Viewer**, these events appear as:
– Short circuit fault: output A
– Short circuit fault: output B

In the **Open interface**, these events appear as:
– AmpShortCircuitLineAFault
– AmpShortCircuitLineBFault

Group: Fault Events
Occurrence: Logs a short circuit fault in the output A and/or B of an amplifier.
Originator: The amplifier with the fault.
Resolve: When the fault is no longer present.
Extra Information: **Severity: High**
Aggregate to zone fault: Always.

Recommended action:
– Check the loudspeakers and connections.

3.8.10 Power converter fault: amplifier section

In the **Call station** and **Logging Viewer**, this event appears as:
– Power converter fault: amplifier section

In the **Open interface**, this event appears as:
– AmpPsuFault

Group: Fault Events
Occurrence: Logs the failure of the amplifier power converter for the audio section.
Originator: The amplifier with the fault.
Extra Information: **Severity: Low**.

Recommended action:
– Contact Technical Support for help.

3.8.11 Power converter fault: controller section

In the **Call station** and **Logging Viewer**, this event appears as:
– Power converter fault: controller section

In the **Open interface**, this event appears as:
– Amp20VFault

Group: Fault Events
Occurrence: Logs the failure of the power converter for the controller section of the amplifier.
Originator: The amplifier with the fault.
Extra Information: **Severity: Low**.

Recommended action:

– Contact Technical Support for help.

3.8.12 Temperature too high

In the **Call station** and **Logging Viewer**, this event appears as:

– Temperature too high

In the **Open interface**, this event appears as:

– OverheatFault

Group: Fault Events

Occurrence: Logs that an amplifier's hardware is overheated.

Originator: The amplifier with the fault.

Resolve: When the amplifier is no longer overheating.

Extra Information:

– The **Severity** is **Low** while the channels are operating.

– If all channels must be disabled, the **Severity** turns to **High**.

Aggregate to zone fault: Yes, when **Severity: High.**

Recommended actions:

– Check if the device/rack environment temperature is within the specifications.

– Check the correct functionality of the device fan.

– If the fan is working correctly, clean the air inlets.

3.9 Control interface module events

Control interface module events can only occur in the PRA-IM16C8.

3.9.1 Control output line failure

In the **Call station** and **Logging Viewer**, this event appears as:

– Control output line failure

In the **Open interface**, this event appears as:

– ControlOutputLineFault

Group: Fault Events
Occurrence: Logs the supervise failure of an output contact.
Originator: The control interface module with the fault.
Resolve: When the fault is no longer present.
Note: Only two of the outputs of the control interface module, A and B, are subject to supervision.

Recommended action:

– Check the affected output and its connections.

3.10 Network switch events

Network switch events can occur in the Cisco IE-5000 series or in the Cisco IE-9320 switch.

3.10.1 Incorrect number of stacked switches

In the **Call station** and **Logging Viewer**, this event appears as:

– Incorrect number of stacked switches

In the **Open interface**, this event appears as:

– StackedSwitchMismatchFault

Group: Fault Events
Occurrence: Logs the mismatch between the configured switches and the detected switches. Logged only when **Supervision** is enabled.
Originator: The Cisco IE-5000 or the Cisco IE-9320 switch with the fault.
Resolve: When the fault is no longer present.

Recommended action:

– Check the device connections.

3.10.2 Power supply fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Power supply fault

In the **Open interface**, this event appears as:

– PowerSupplyFault

Group: Fault Events
Occurrence: Logs the failure of the power supply. Logged only when **Supervision** is enabled.
Originator: The Cisco IE-5000 or Cisco IE-9320 switch with the fault. This information is presented differently:

– In the case of non-stacked switches, only the device name appears.
– In the case of stacked switches, both the device name and the switch number appear.

Resolve: When the fault is no longer present.

Recommended action:

– Check the power connections of the affected device.
– Contact the Cisco Technical Support for help.

3.10.3 Redundant data path fault

In the **Call station** and **Logging Viewer**, this event appears as:

– Redundant data path fault

In the **Open interface**, this event appears as:

– RedundantDataPathFault

Group: Fault Events
Occurrence: Logs that the interconnection between the stacked switches is not redundant, for example, when one of the two cables is disconnected. Logged only when **Supervision** is enabled.
Originator: The Cisco IE-5000 or the Cisco IE-9320 switch with the fault.

Resolve: When the fault is no longer present.

Recommended action:

– Check the device connections.

4 Call events

Every event in the group **Call Events** can occur in any device that can start a call. In all cases, the logged ID is generated by the system controller.

4.1 Call start

In the **Logging Viewer**, this event appears as:
– **Call start**

In the **Open interface**, this event appears as:
– CallStart

Group: Call Events
Occurrence: Logs the start of a call.
Originator: A control input, an Open Interface client, or a device.
Extra Information:

For an original call:
– The **Call definition** name used for the call.
– The priority of the call.
– The routing scheme of the call: partial or stacked.
– The timing scheme of the call: immediate or time-shifted.
– The name of the start chimes of the call.
– The name of the messages that are part of the call.
– The number of times the messages that are part of call are repeated.
– If the call has live speech configured.
– The name of the audio input used for live speech, if applicable.
– The name of the end chimes of the call.
– The name of the addressed zones.

For a replay call:
– The reference to the original call ID.
– The **Call definition** name used for the call.
– The priority of the call.
– The routing scheme of the call: Partial.
– The timing scheme of the call: Immediate.
– The name of the call zones.
Only the routing that is part of the call is logged.

4.2 Call end

In the **Logging Viewer**, this event appears as:
– **Call end**

In the **Open interface**, this event appears as:
– CallEnd

Group: Call Events
Occurrence: Logs the end of a call.
Originator:

– In the case of an overruled call, of lost resources, or if the system decides to end the call: the system controller.
– In the case of a call ended by a stop command: the control input responsible for the command.
– In any other case: the control input, the Open Interface client, or the device that caused the end of the call.

Extra Information:
– For an ended call: The last completed phase.
– For an aborted call: The reason for the abort and the active phase at the moment of the abort.

4.3 Call change

In the **Logging Viewer**, this event appears as:
– **Call change**

In the **Open interface**, this event appears as:
– CallChangeResource

Group: Call Events
Occurrence: Logs the change in the zones of a call. Occurs when the zone resources are:
– Overruled
– Missing, or
– Added or removed manually.

Originator: A control input, an Open Interface client, or a device.

Extra Information:
– The name of the zone removed from the call.
– The name of the zone added to the call.

4.4 Call reset

In the **Logging Viewer**, this event appears as:
– **Call reset**

In the **Open interface**, this event appears as:
– CallReset

Group: Call Events
Occurrence: Logs the reset of a call, which restarts the call. A call can only be reset when **Continue call**, in the **Call definitions**, is set to **After interruption**.
Originator: A system controller.
Extra Information:
– The reason for the reset: Either **Lost resources** or **System**.
– The active phase of the call at the moment of the reset.

4.5 Call restart

In the **Logging Viewer**, this event appears as:
– **Call restart**

In the **Open interface**, this event appears as:
– CallRestart

Group: Call Events
Occurrence: Logs the restart of a call after an interruption. This event is only logged if the call was reset and when **Continue call**, in the **Call definitions**, is set to **After interruption**.
Originator: A control input, an Open Interface client, or a device.
Extra Information:
For an original call:
- The **Call definition** name used for the call.
- The priority of the call.
- The routing scheme of the call: partial or stacked.
- The timing scheme of the call: immediate or time-shifted.
- The name of the start chimes of the call.
- The name of the messages that are part of the call.
- The number of times the messages that are part of call are repeated.
- If the call has live speech configured.
- The name of the audio input used for live speech, if applicable.
- The name of the end chimes of the call.
- The name of the addressed zones.

For a replay call:
- The reference to the original call ID.
- The **Call definition** name used for the call.
- The priority of the call.
- The routing scheme of the call: Partial.
- The timing scheme of the call: Immediate.
- The name of the call zones.

Only the routing that is part of the call is logged.

4.6 Call timeout

In the **Logging Viewer**, this event appears as:
- **Call timeout**

In the **Open interface**, this event appears as:
- CallTimeout

Group: Call Events
Occurrence: Logs the time-out of a stacked call.
Originator: A system controller.
Extra Information: List of the zones that did not receive this call completely.

5 General events

5.1 System-wide events

5.1.1 Backup power mode started

In the **Logging Viewer**, this event appears as:

– **Backup power mode started**

In the **Open interface**, this event appears as:

– BackupPowerModeStart

Group: General Events
Occurrence: Logs the start of the backup power mode.
Originator: The first device that starts the backup power mode.

Note: When the system is in the backup power mode, all calls under the configured priority are aborted.

5.1.2 Backup power mode ended

In the **Logging Viewer**, this event appears as:

– **Backup power mode ended**

In the **Open interface**, this event appears as:

– BackupPowerModeEnd

Group: General Events
Occurrence: Logs the end of the backup power mode.
Originator: The last device that ends the back-up power mode.

5.1.3 Call logging events discarded due to logging queue overflow

In the **Logging Viewer**, this event appears as:

– **Call logging events discarded due to logging queue overflow**

In the **Open interface**, this event appears as:

– CallLoggingSuspended

Group: General Events
Occurrence: Logs that the logging of the call events is suspended until the queue is manageable again. This event happens when the system controller is unable to communicate all of the call events generated. As a result, some call events are lost.
Resolve: The overflow is resolved when the queue size drops to 300 calls.

5.1.4 Logging of call events resumed

In the **Logging Viewer**, this event appears as:

– **Logging of call events resumed**

In the **Open interface**, this event appears as:

– CallLoggingResumed

Group: General Events
Occurrence: Logs that the logging of call events resumed after an overflow of the queue in the system controller.
Resolve: The overflow is resolved when the queue size drops to 300 calls.

5.1.5 LoggingApplicationStartup

In the **Open interface**, this event appears as:

– LoggingApplicationStartup

Group: General Events
Occurrence: This event is generated on the server part of the Logging Application in the PC. It is not generated in the PROMATRIX 9000 system. When you start the Logging Application, it starts receiving and storing event data. This event logs the date and time on which the Logging Application is started.

5.1.6 LoggingApplicationShutdown

In the **Open interface**, this event appears as:

– LoggingApplicationShutdown

Group: General Events
Occurrence: This event is generated on the server part of the Logging Application in the PC. It is not generated in the PROMATRIX 9000 system. When you close the Logging Application, it stops receiving and storing event data. This event logs the date and time on which the Logging Application is closed.

5.2 Device events

Device events can occur in multiple devices but not all devices.
They can occur in:

- The system controllers, PM9-SCL and PM9-SCS.
- The power amplifiers, PM9-AD604 and PM9-AD608.
- The multifunction power supply, PM9-MPS3.
- The call stations, PM9-CSLD, PM9-CSLW and PRA-CSBK.
- The interface modules, PRA-IM16C8 and PRA-IM2A2.
- The network switches, PRA-ES8P2S and PRA-ES8E8S.

5.2.1 Emergency state active

In the **Logging Viewer**, this event appears as:

- **Emergency state active**

In the **Open interface**, this event appears as:

- EvacSet

Group: General Events
Occurrence: Logs the start of the evacuation alarm.
Originator: A control input, an Open Interface client, or a device.

5.2.2 Emergency state acknowledge

In the **Logging Viewer**, this event appears as:

- **Emergency state acknowledge**

In the **Open interface**, this event appears as:

- EvacAcknowledge

Group: General Events
Occurrence: Logs that the evacuation alarm was acknowledged.
Originator: A control input, an Open Interface client, or a device.

5.2.3 Emergency state reset

In the **Logging Viewer**, this event appears as:

- **Emergency state reset**

In the **Open interface**, this event appears as:

- EvacReset

Group: General Events
Occurrence: Logs the reset of the evacuation alarm.
Originator: A control input, an Open Interface client, or a device.

5.2.4 Unit connect

In the **Logging Viewer**, this event appears as:

- **Unit connect**

In the **Call station** and **Logging Viewer**, this event appears as:

- UnitConnect

Group: General Events
Occurrence: Logs the connection of a device to the system.
Originator: The device that was connected.
Note: This event is not generated by the Open interface client.

5.2.5 User logged in

In the **Logging Viewer**, this event appears as:
– **User logged in**

In the **Open interface**, this event appears as:
– UserLogIn

Group: General Events
Occurrence: Logs the ID of the user that entered the system.
Originator:
– The device where the login occurs, or
– The IP-address of the client from where the event occurs, including the user ID.

5.2.6 User login attempt failed

In the **Logging Viewer**, this event appears as:
– **User log in attempt failed**

In the **Open interface**, this event appears as:
– UserLogInFailed

Group: General Events
Occurrence: Logs the failure of a login attempt. This event is not logged during a lock-out due to too many login attempts.
Originator:
– The device where the login attempt occurs, or
– The IP-address of the client from where the event occurs, including the user ID.

5.2.7 User logged out

In the **Logging Viewer**, this event appears as:
– **User logged out**

In the **Open interface**, this event appears as:
– UserLogOut

Group: General Events
Occurrence: Logs the user-ID that logged off of the system.
Originator:
– The device where the log off occurs, or
– The IP-address of the client from where the event occurs, including the user ID.

5.3 System controller events

System controller events can only occur in the PM9-SCL and PM9-SCS.

5.3.1 System restarted

In the **Logging Viewer**, this event appears as:

– **System restarted**

In the **Open interface**, this event appears as:

– SCStartup

Group: General Events
Occurrence: Logs the start of the system controller.
Originator: A system controller.

5.3.2 Configuration saved

In the **Logging Viewer**, this event appears as:

– **Configuration saved**

In the **Open interface**, this event appears as:

– ConfigurationSaved

Group: General Events
Occurrence: Logs the saving of changes to the configuration.
Originator: A system controller.
Resolve: Immediately after acknowledgment.
Extra Information:

– The identification number of the configuration, which increases with every **Save** from the configuration interface.

5.3.3 Backup created

In the **Logging Viewer**, this event appears as:

– **Backup created**

In the **Open interface**, this event appears as:

– ConfigurationBackupCreated

Group: General Events
Occurrence: Logs the creation of a backup of the configuration.
Originator: A system controller.
Resolve: Immediately after acknowledgment.
Extra Information:

– If the backup of the Configuration succeeded.
– If the backup of the Security settings succeeded.
– If the backup of the Messages succeeded.
– The identification number of the configuration, which increases with every **Save** from the configuration interface.

5.3.4 Backup restored

In the **Logging Viewer**, this event appears as:

– **Backup restored**

In the **Open interface**, this event appears as:
– ConfigurationRestored

Group: General Events
Occurrence: Logs that the configuration on the system controller is restored from a backup file.
Originator: A system controller.
Resolve: Immediately after acknowledgment.
Extra Information:
– If the Configuration is restored.
– If the Security settings are restored.
– If the Messages are restored.
– The identification number of the configuration, which increases with every **Save** from the configuration interface.

5.3.5 Demote to backup

In the **Logging Viewer**, this event appears as:
– **Demote to backup**

In the **Open interface**, this event appears as:
– DemoteToBackup

Group: General Events
Occurrence: Logs the detection of a critical fault by the duty controller in a redundant system. As a result, the duty controller demotes itself to the position of standby controller.
Originator: A system controller.

5.3.6 Security certificate changed

In the **Logging Viewer**, this event appears as:
– Security certificate changed

In the **Open interface**, this event appears as:
– SecurityCertificateChanged

Group: General Events
Occurrence: Logs the change of the certificate of the Open interface or of the interface configuration.
Originator:
– The system controller if the certificate is changed automatically, or
– The system controller and the user ID of the user logged in if the certificate is changed manually.
Extra Information:
– Which certificate changed: the Open interface certificate or the configuration interface certificate.
– The type of certificate: internal or external.

5.4 Call station events

Call station events can only occur in the PM9-CSLD, PM9-CSLW and PRA-CSBK.

5.4.1 In control

In the **Logging Viewer**, this event appears as:

– **In control**

In the **Open interface**, this event appears as:

– InControl

Group: General Events
Occurrence: Logs the swap of the in-control status of a call station emergency group.
Originator: The call station emergency group that is now in control.
Extra Information:

– The name of the call station emergency group.

5.5 Open interface client events

Open interface client events can only occur in Open interface clients.

5.5.1 Device connected via Open Interface

In the **Logging Viewer**, this event appears as:

– **Device connected via Open Interface**

In the **Open interface**, this event appears as:

– OpenInterfaceConnect

Group: General Events
Occurrence: Logs the connection of an Open interface client, such as the Logging applications.
Originator: The Open Interface client. Includes the user ID of the connection.

5.5.2 Device disconnected via Open Interface

In the **Logging Viewer**, this event appears as:

– **Device disconnected via Open Interface**

In the **Open interface**, this event appears as:

– OpenInterfaceDisconnect

Group: General Events
Occurrence: Logs the disconnection of an Open interface client, such as the Logging applications.
Originator: The Open Interface client. Includes the user ID of the connection.

5.5.3 Device attempted to connect via Open Interface

In the **Logging Viewer**, this event appears as:

– **Device attempted to connect via Open Interface**

In the **Open interface**, this event appears as:

– OpenInterfaceConnectFailed

Group: General Events
Occurrence: Logs the failed connection attempt of an Open Interface client, such as the Logging applications. This event is not logged during a lockout due too many connection attempts.
Originator: The Open Interface client. Includes the user ID of the connection.

5.6 SIP / VoIP client

SIP / VoIP client events can only occur when a SIP account is configured.

5.6.1 SIP / PABX fault

In the **Call station** and **Logging Viewer**, this event appears as:

– **SIP / PABX fault**

In the **Open interface**, this event appears as:

– VoIPFault

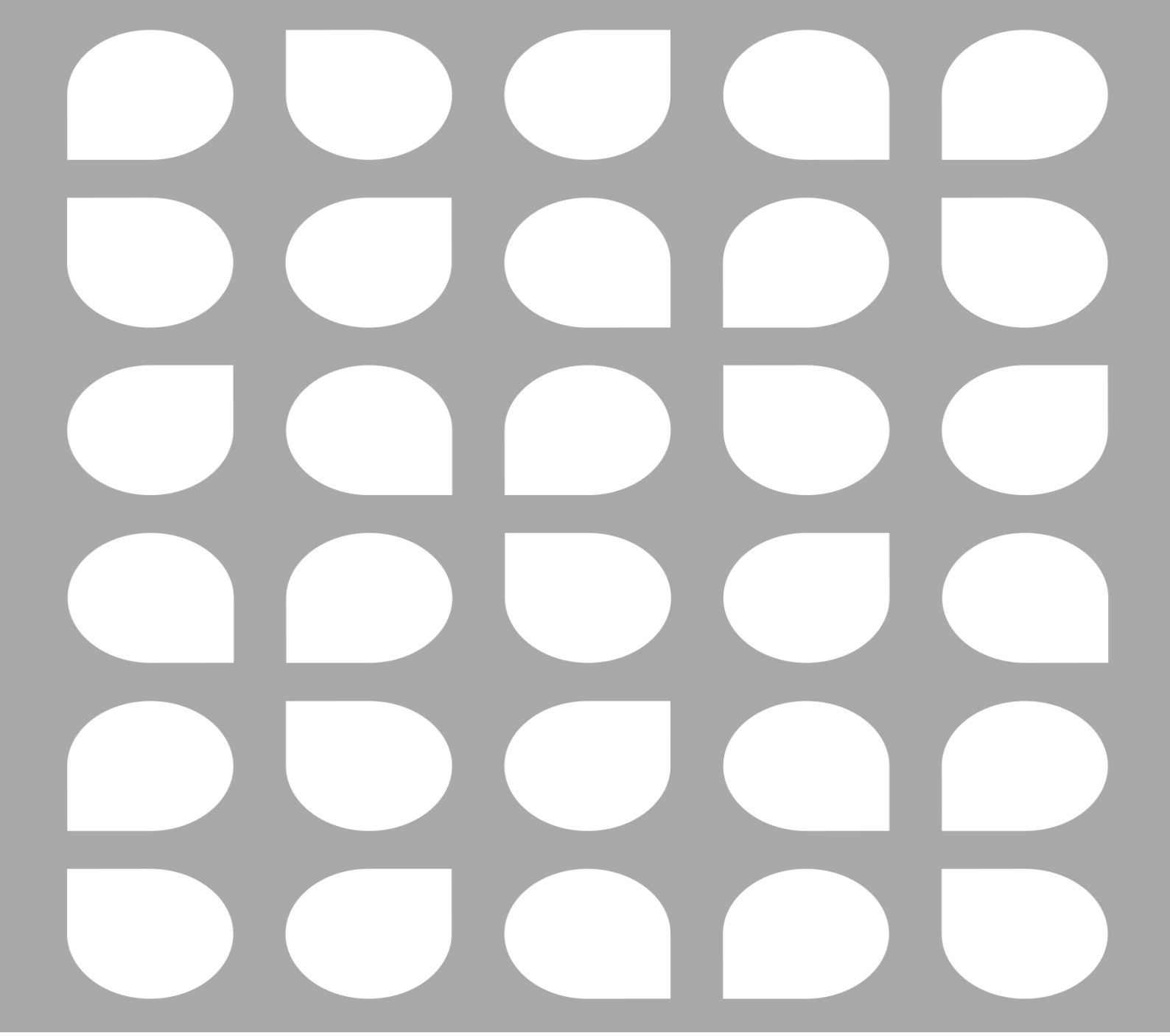
Group: General Events

Occurrence: Logs that SIP calls to the system are no longer possible due one or more of the following events:

– The SIP registration for one or more of configured extensions is not possible at any of the given SIP Servers.

– The configuration retrieved from the controller is invalid or cannot be processed correctly.

Originator: The VoIP client.



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202509011541