Mitel MiContact Center Enterprise

OPEN APPLICATION SERVER – FAULT AND SECURITY MANAGEMENT USER GUIDE

Release 9.3

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INTRODUCTION

The OAS event reporting function detects abnormal system occurrences and security audit information. These events (alarms) are stored in the Microsoft Windows Event Log as follows:

1. The OAS object reporting an alarm or security event sends the alarm/event to the Alarm Event Channel.

The Alarm Service, which resides on the Basic Services host, reads the alarms and security events from the Alarm Event Channel and stores them in the Microsoft Windows Event Log. Events from OAS components are normally logged into the Event Log on the server running OAS Basic Services.

2. If the Alarm Event Channel is out of service, the alarms and security events are stored in the Microsoft Windows Event Log on the host of the OAS object reporting the event.

WHAT YOU WILL LEARN

This section describes the following topics:

- OAS alarms
- Security events
- Viewing and interpreting alarms and security events (via the Micro- soft Windows Event Viewer)
- Reading and analyzing alarms

In addition, the list of alarms and security events are provided in this section.

ABOUT ALARMS

Alarms can be in one of two states: raised or cleared.

- **Raised**: Abnormal behavior is detected and an alarm describing the behavior is logged. A severity level (error, warning, or information) is assigned to each raised alarm.
- **Cleared**: The condition that previously caused an alarm to be raised is no longer evident and another alarm describing this occurrence is logged.

ABOUT SECURITY

Security management:

- allows or denies user access to OAS. User authentication validates the user and user authorization grants an authenticated user access to predefined parts of OAS.
- provides a security audit trail. The audit trail provides information about logons, logoffs, and system component accesses.

Users are assigned to Windows global user groups through the Windows Active Directory Users and Configuration Snap-in.

The global user group configured as the OAS Client Group in the OAS configuration database contains the users permitted to open a TSAPI stream with OAS. Before an OAS client application can connect to OAS, the user must be specified in the OAS Client Group.

The global group configured as the OAS Admin Group in the OAS configuration database contains the users permitted to work with the Management Console program. Before OAS can be configured, the user must be specified in the OAS Admin Group.

VIEWING AND INTERPRETING ALARMS AND SECURITY EVENTS

Using the Windows Event Viewer, you can view all the OAS alarms and security events or details about a specific alarm or security event. To view the OAS alarms and security events in the Windows Event Log, open the Windows Event Viewer and click Application Log from the tree. The Event Viewer automatically displays events as shown in the figure below. For details about the information provided in Windows Event Viewer, refer to the Online Help.

| e <u>A</u> ction <u>V</u> iew <u>H</u> elp | | | | | | | | | |
|--|-----------------|-----------|------------|---------|---------------|-------|------|------------|------|
| → E 💽 🗳 | B 😰 🖬 | | | | | | | | |
| Event Viewer (Local) | Application 27 | 'event(s) | | | | | | | |
| Application | Туре | Date | Time | Source | Category | E 🛆 | User | Computer | |
| System | Success Audit | 11/5/2009 | 2:46:35 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER1 | |
| Saved Application Log | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER1 | |
| a) | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER1 | |
| | 😽 Success Audit | 11/5/2009 | 2:46:31 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:37 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | 😽 Success Audit | 11/5/2009 | 2:46:36 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:36 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | 😽 Success Audit | 11/5/2009 | 2:46:35 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | 😽 Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | 😽 Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER1 | |
| | Success Audit | 11/5/2009 | 2:46:34 PM | OAS-OCS | Object Access | 47 | N/A | OASSERVER1 | |
| | Information | 11/5/2009 | 2:46:38 PM | OAS-SSS | In-Service | 10002 | N/A | OASSERVER1 | |
| | Information | 11/5/2009 | 2:46:36 PM | OAS-SSS | In-Service | 10002 | N/A | OASSERVER1 | |
| | Information | 11/5/2009 | 2:46:35 PM | OAS-SSS | In-Service | 10002 | N/A | OASSERVER1 | 1000 |

VIEWING EVENT PROPERTIES

You can view more information about a selected alarm or security event in the Event Properties display. To view additional information about a specific alarm or security event:

- 1. Click the event in the Application Log.
- 2. On the View menu, select Event Properties. A sample Event Properties dialog is provided in the figure below.

| ent Prope | rties | | | | ? |
|--|--|---|------------|---|--------|
| vent | | | | | |
| Date: Time: Type: User: Computer: Description | 6/8/2004 10:17 Information N/A STS5EUA1 | Source: Category: Event ID: | | | + + |
| Reporting Managed Managed Event Tex | Object Host I Object Name Object Type: Object Host I Object Name | Name: STS : OAS Netv Name: STS : NRM NRM | 5EUA1 1 | n Service urce Manager jullv started. | • |
| | Dytes + W | oids | | | 4 |
| | | [(|)K | Cancel | Apply |

READING AND ANALYZING ALARMS

When you read and analyze OAS alarms, it is important to note the following:

- A fault condition is currently active if an alarm describing the fault has been raised and the corresponding alarm has not been cleared.
- If an alarm is raised against a managed object that had previously raised an alarm as the reporting object, then the previously raised alarm will not clear.

Following are two examples to consider when reading and analyzing alarms.

EXAMPLE

In the sample Event Viewer shown in Figure 3 below:

- 1. OAS-SSS raised an alarm for NRM faulty at 3:03:21 PM (Event ID: 10006)
- 2. OAS-SSS cleared the alarm at 3:03:29 PM through a Success Audit (Event ID: 10006)

Example Details about the events are provided in the Event Properties dialogs shown in the figures below.

| le <u>A</u> ction ⊻iew | Help 1 🖸 🗟 🔓 🖸 | 1 | | | | | | |
|-------------------------|-------------------|-----------|------------|---------|-----------------|-------|------|-----------|
| Event Viewer (Local) | | 7. | | | | | | |
| Application Security | Туре | Date | Time | Source | Category | Event | User | Computer |
| Security | Success Audit | 11/5/2009 | 3:03:29 PM | OAS-SSS | NRM Faulty | 10006 | N/A | OASSERVER |
| A DARCEIL | Information | 11/5/2009 | 3:03:29 PM | OAS-NRM | Tenant Disabled | 10003 | N/A | OASSERVER |
| | Success Audit | 11/5/2009 | 3:03:29 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER |
| | Success Audit | 11/5/2009 | 3:03:28 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER |
| | Success Audit | 11/5/2009 | 3:03:28 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER |
| | Success Audit | 11/5/2009 | 3:03:28 PM | OAS-OCS | Logon | 45 | N/A | OASSERVER |
| | Error | 11/5/2009 | 3:03:21 PM | OAS-SSS | NRM Faulty | 10006 | N/A | OASSERVER |
| | Success Audit | 11/5/2009 | 3:03:18 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER |
| | Success Audit | 11/5/2009 | 3:03:16 PM | OAS-OCS | Logoff | 46 | N/A | OASSERVER |

| ent Prope | rties | | | | ? |
|--|--|---|--------------------------------|---------------|-------------|
| Event | | | | | |
| | 6/8/2004 10:27 Error N/A STS5EUA1 | Source: Category: Event ID: | | 222 | + + = |
| Reporting Managed Managed Event Tex | Object Host I Object Name Object Type: Object Host I Object Name | Name: STS c OAS Netv Name: STS c NRM SSS | -SSS vork Res 5EUA1 4 | ource Manager | ▲ ▼ |
| | <u>pytes + yv</u> | oids | | | × |
| | | | | | |

| ent Prope | rties | | | | ? |
|--|--|---|----------------------------------|-------|-------------|
| Event | | | | | |
| and a second | 6/8/2004 10:27 Error N/A STS5EUA1 | Source: Category: Event ID: | OAS-SSS NRM Faulty 10006 | | + + = |
| Reporting Managed Managed Managed Event Tex | Object Host I Object Name Object Type: Object Host I Object Name | Name: STS : OAS Netv Name: STS : NRM SSS | -SSS vork Resource 1 5EUA1 | | Ĩ |
| | | | | | * |
| | | | к | ancel | Apply |

LIST OF ALARMS AND SECURITY EVENTS

The following table specifies the OAS alarms. The alarms are grouped alphabetically by the severity of the raised alarm (Type): Error, Warning, and Information.

| EVENT | SOURCE | REPORTING OBJECT HOST NAME | REPORTING OBJECT NAME | MANAGED OBJECT TYPE | MANAGED OBJECT HOST NAME | MANAGED OBJECT NAME | SYSTEM ACTION |
|---|-------------|----------------------------------|-----------------------------|---------------------------|-----------------------------------|--------------------------------|---------------------------|
| Error alarms (Ra | aised and C | leared) | | | | | |
| Alarm Service Faulty | SSS | Host | OAS-SSS | Alarm Service | Host | AS | Automatically restarted |
| Connections to MX-ONE Faulty | AppLink | Host | Call Control Server | MX-ONE | | Call Control Server name | Automatically reconnected |
| AppLink faulty | SSS | Host | | AppLink | Host | Call Control Server name | Automatically restarted |
| Connection to AppLink Server Faulty | NRM | Host | | Media Server | | Call Control Server name | Automatically reconnected |

| EVENT | SOURCE | REPORTING OBJECT HOST NAME | REPORTING OBJECT NAME | MANAGED OBJECT TYPE | MANAGED OBJECT HOST NAME | MANAGED OBJECT NAME | SYSTEM ACTION |
|--|---------|----------------------------------|-----------------------------|--------------------------------|-----------------------------------|--|---------------------------|
| Connection to Configuration Service Faulty | SSS | Host | OAS_SSS | OCS | Host | OCS | None |
| Connection to Media Server Faulty | NRM | Host | | Media Server | | Media Server name | Automatically reconnected |
| Connection to SQL Server Faulty | PDC | Host | | SQL Server | Host | | Automatically reconnected |
| Logical Device Fault | AppLink | Host | Call Control Server | Logical Device | | Call Control Server name | None |
| Media Server Faulty | SSS | Host | OAS_SSS | Media Server | Host | Media Server name | Automatically restarted |
| NRM Faulty | SSS | Host | OAS_SSS | NRM | Host | Media Server name | Automatically restarted |
| No Media Services Available | NRM | _ | CTI Server | Media Server | _ | Media Server name | Automatically reconnected |
| Trace Service Faulty | SSS | Host | OAS-SSS | Trace Service | Host | OTS | Automatically restarted |
| PDC Faulty | SSS | Host | OAS-SSS | PDC | Host | PDS | Automatically restarted |
| Physical Device Faulty | AppLink | Host | Call Control | Physical Device | | Call Control Server name, Device Identifier | None |
| Virtual Device Faulty | NRM | Host | Server | Virtual Device | _ | Device identifier | Automatically restarted |
| Aastra Daemon not available | SSS | Host | — | Daemon | Host | Aastra | Automatically restarted |
| License Fault | NRM | Host | OAS-SSS | Network Resource Manager | Host | Daemon | None |

| EVENT | SOURCE | REPORTING OBJECT HOST NAME | REPORTING OBJECT NAME | MANAGED OBJECT TYPE | MANAGED OBJECT HOST NAME | MANAGED OBJECT NAME | SYSTEM ACTION |
|--|---|----------------------------------|-----------------------------|--------------------------------|-----------------------------------|---------------------------|---------------------------|
| Warning Alarn | ns (Raised | and Cleared) | | | | | |
| Applink | Connecti on to Config. Service Faulty | Host | CTI Server | Config. Service | Host | | Automatically reconnected |
| | Host | Call Control Server | | | | OCS | |
| Media Server | | CTI Server | | | | | |
| NRM | Host PDC | Host | _ | | | | |
| SSS | Host | OAS-SSS | | | | | |
| Connection to Event Channel Service Faulty | AppLink | Host | Call Control Server | Event Channel Service | Host | Event Channel | Automatically reconnected |
| Media Server | — | Media Server | _ | | | | |
| PDC | NRM | Host | | | | | - |
| SSS | Host Host | | | | | | - |
| Tenant authentication failure | NRM | Host | NRM | Network Resource Monitor | Host | _ | None |
| Information Al | arms (Nev | er Cleared) | | | | | |
| In Service | SSS | Host | OAS-SSS | Alarm Service | Host | AS | None |
| | | | | AppLink | Call Control Server Name | None | |
| | | | | Media Server | Media Server Name | None | |
| | | | | NRM | NRM | None | |

| EVENT | SOURCE | REPORTING OBJECT HOST NAME | REPORTING OBJECT NAME | MANAGED OBJECT TYPE | MANAGED OBJECT HOST NAME | MANAGED OBJECT NAME | SYSTEM ACTION |
|----------------|--------|----------------------------------|-----------------------------|---------------------------|-----------------------------------|-----------------------------------|------------------|
| | | | | Trace Service | | OTS | None |
| | | | | PDC | | PDS | None |
| Out of Service | SSS | Host | OAS-SSS | Alarm Service | Host | AS | None |
| | | | | AppLink | Call Control Server Name | Call Control Server Name | |
| | | | | Media Server | Media Server Name | None | |
| | | | | NRM | | Media Server Name | None |
| | | | | Trace Service | | OTS | None |
| | | | | PDC | | PDS | None |

The following table describes the OAS security events:

| EVENT DESCRIPTION | CLASSIFICATION | SOURCE | REPORTING OBJECT HOST NAME | ТҮРЕ |
|----------------------|---------------------|---------|----------------------------------|---------------------------------|
| Logoff | Platform Management | NRM OCS | Host | Success Audit |
| Logon Authentication | Platform Management | NRM OCS | Host | Success Audit, Failure Audit |
| Object Access | Read/Write | OCS | Host | Success Audit, Failure Audit |



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