Tech Note 886
Managing "Lost Alarm Communication" Messages

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Introduction

Lost Alarm Communication alarm messages appear when the connection to the alarm provider is lost. These alarms are built-in to the **ITAlarmProvider** primitive (DLL).

Lost Alarm Communication alarm messages are generated when the ITAlarmProvider loses communication to an Area, a Platform, an AppEngine or a DIObject. These networked nodes have alarm subscription modules called **NotificationDistributors**. These alarms cannot be configured or disabled.

Your diagnostic options are to determine if network connectivity is the problem, or if the ITAlarmProvider (InTouch Provider Node) or other nodes have resource issues.

The **Lost Alarm Communication** alarms have a default priority of **1** (the highest priority). This means that when network nodes lose connectivity or have resource issues, these alarms can fill up the alarm client, preventing other alarms from being displayed. To avoid seeing these alarms in the alarm client, you can change the alarm priority to a higher value (lower priority).

Application Versions

- Wonderware Application Server 3.1 SP3 P01 and 3.5

- InTouch 10.1 SP3 P01

Note: To investigate the root cause of an Alarm Communication issue, you need the SMC log files, the archived Alarm records (exported to csv or the actual backup of the Alarm DB) and the Event Viewer logs from the appropriate time period. Sometimes the network topology will be needed.

What Generates a Lost Communication Alarm

- The network was not planned as advised in the tech article **Best Practices for Topology Configuration**. This document provides network architecture configuration best practices. In this case, if the network is not configured properly, some platforms can exceed the maximum number of timeout heartbeats and lose communication to the Galaxy.

- The binding order of multiple NIC cards is configured incorrectly.

- The NIC card is corrupted or the cable is not plugged in properly.

- The license supports fewer Platforms than are actually deployed.

- The Galaxy Time Master is configured incorrectly, resulting in time sync mismatches on the Galaxy computers.

- A redundant pair is out of synch.

Changing the Alarm Priority

The following procedure explains how to change the Alarm Priority for all nodes in the Galaxy.

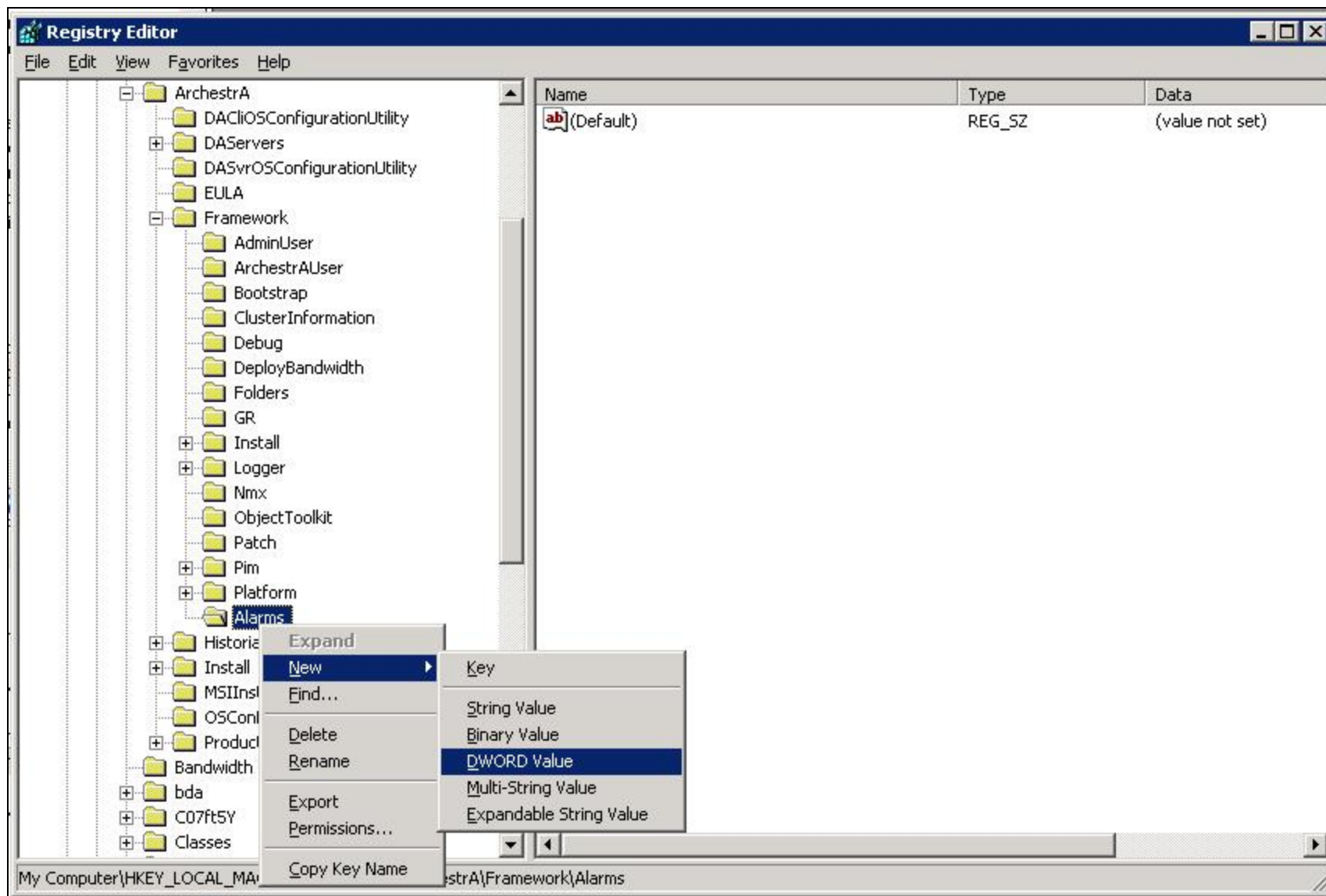1. Create a new registry key called **Alarms** under the section **HKEY_LOCAL_MACHINE\SOFTWARE\ArchestrA\Framework**.

FIGURE 1: DWORD VALUE

> **Note:** On a 64-bit OS the path is **HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ArchestrA\Framework**

2. Create the new DWORD value **CommunicationErrorAlarmPriority**, and set the value (priority) between 0-999 (Using the decimal **Base** option).
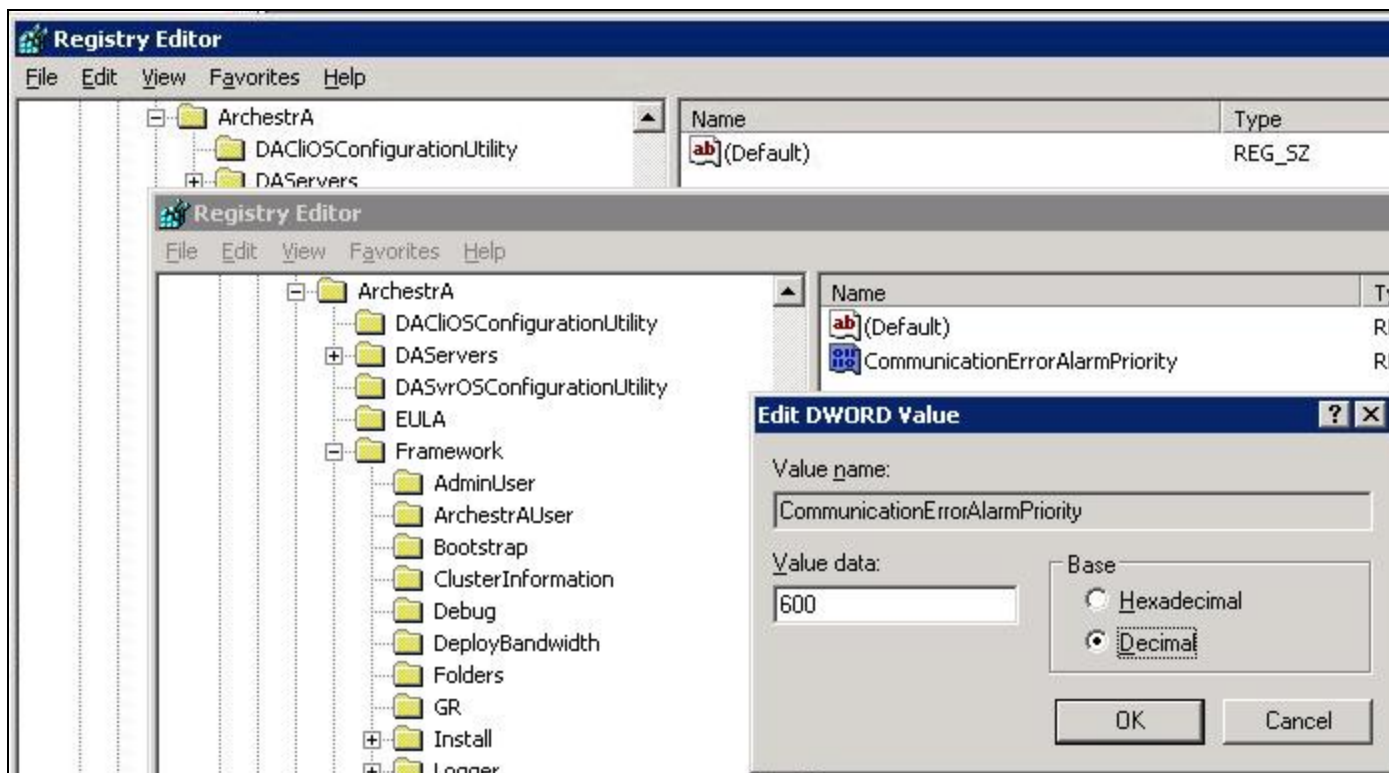

FIGURE 2: DWORD CONFIGURATION

> **Note:** If the **CommunicationErrorAlarmPriority** value is not set or is out of range, the default value of **1** is used.

3. Restart the machine after changing the value in the registry to apply the changes.

FIGURE 3: ALARM PRIORITY SHOWN IN ALARM VIEWER

In case you want to prevent the alarm from being displayed on the Alarm Viewer Control, you can assign a low priority to the alarm such as **999**.

Note: This example shows the AlarmViewer ActiveX Control. This *Tech Note* also applies to the Alarm Client Control (EAC).

- From the **Query** tab in the Alarm Viewer Ctrl Properties window, (Figure 4 below), set the priorities of the alarms to a specific value. The priority range can be between 1 and 999.

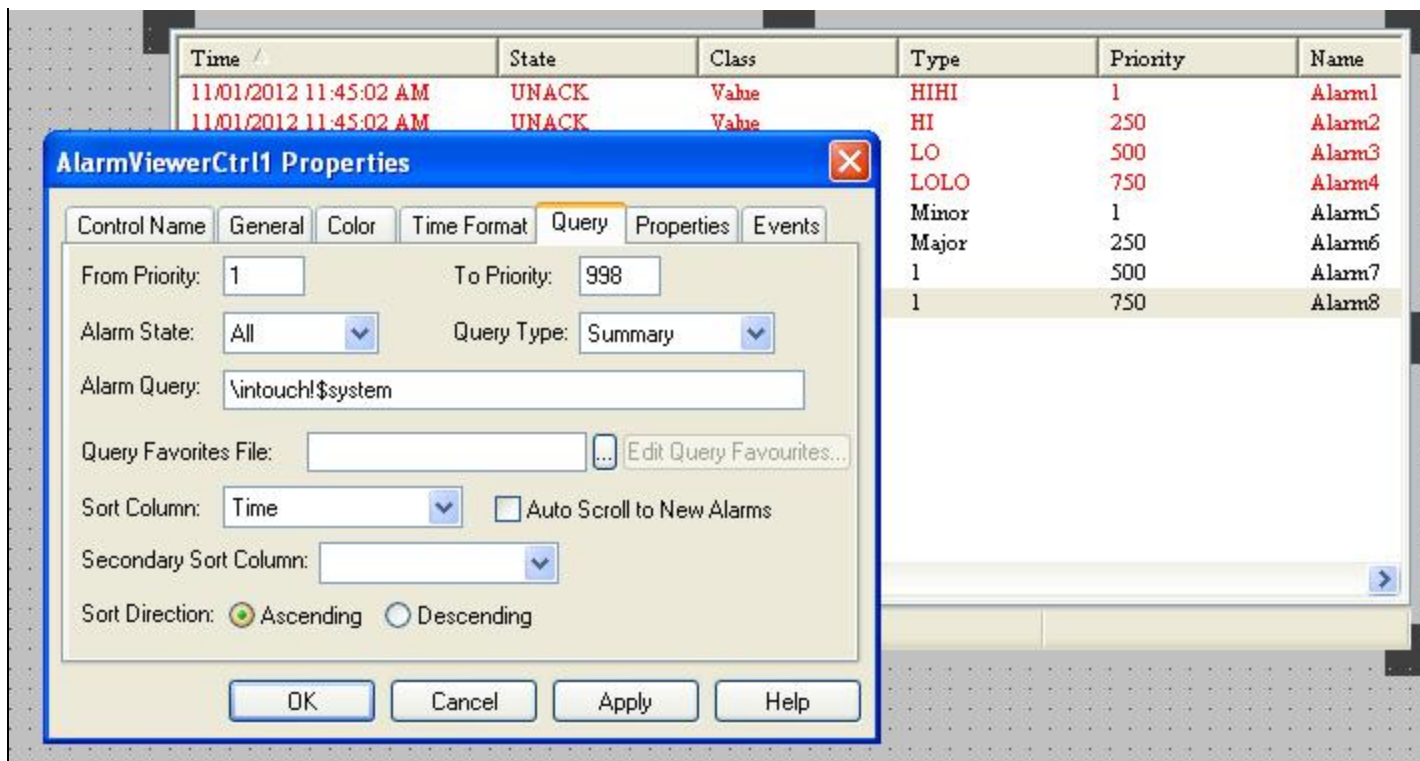 Change the **To Priority** field to **998** so that the low-priority 999 alarms will not be queried.

FIGURE 4: LOW ALARM PRIORITY SETTING FOR ALARM VIEWER

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