ASE 16.0 SP02 Beta - Installing Fault Manager for Database Always-on Option (HADR)

Purpose

To provide an instruction to install Fault Manager for Database Always-on Option (HADR) in ASE 16.0 SP02.

Overview

The fault manager monitors the health of the primary and standby servers, and triggers a fail over if the primary server or host fails and the HADR system is running in synchronous mode. This article covers its installation and configuration.

Prerequisites

- The Fault Manager must run on the third machine
- The SAP ASE, Replication Management Agent, Replication Server, and SAP Host Agent must be running on primary and companion sites before you configure the Fault Manager
- The node running the Fault Manager must use the same platform as the HADR nodes
- The sapadm operating system user must have a valid password. This user is created when the SAP Host Agent is installed by the SAP ASE installer but must be manually assigned a password. At OS prompt, run “sudo passwd sapadm” to set the new password of sapadm unix login. I used this password for the SAP Host Agent User Password in the FM setup.
- Verify SAP Host Agent is installed and started on primary and companion

Ps –ef | grep saphostexec
[root@vantgvmlnx437 logs]# ps -ef | grep saphostexec
root    26616  19300 0 18:20 pts/1 00:00:00 grep saphostexec
root    32460     1 0 Apr30 ? 00:02:07 /usr/sap/hostctrl/exe/saphostexec pf=/usr/sap/hostctrl/exe/host_profile

Installation and Setup

Transfer the fault manager responses file from the secondary site of your HADR setup.

Cd ASE_Suite/FaultManager

./setup.bin -f fault_manager_responses.txt
SAP® Fault Manager 1.0

Introduction

InstallAnywhere will guide you through the installation of Fault Manager 1.0 Beta 2.

It is strongly recommended that you quit all programs before continuing with this installation.

Click the 'Next' button to proceed to the next screen. If you want to change something on a previous screen, click the 'Previous' button.

You may cancel this installation at anytime by clicking the 'Cancel' button.

SAP® Fault Manager 1.0

End-user License Agreement

Read the following license agreement carefully, then choose to agree or disagree with the terms.

United States of America

LICENSE AGREEMENT

General (applies to all countries, except those for which a specific country/language version is posted)

IMPORTANT NOTICE: READ THIS LICENSE AGREEMENT CAREFULLY BEFORE USING THE ENCLOSED PROGRAM. YOU MAY USE THE PROGRAM ACQUIRED ONLY IN THE COUNTRY IN WHICH THIS LICENSE WAS ACCEPTED, AND ONLY IN ACCORDANCE WITH THE FOLLOWING TERMS AND CONDITIONS. IF YOU DO NOT AGREE TO BE

I DO NOT agree to the terms of this license and will not install this software.

I agree to the terms of the SAP license for the install location specified.
SAP® Fault Manager 1.0

Choose Install Folder

Where would you like to install?
/workhub/opt/sap

- Restore Default Folder
- Choose

SAP® Fault Manager 1.0

Pre-installation Summary

Please Review the Following Before Continuing:

Product Name:
Fault Manager

Install Folder:
/workhub/opt/sap

Product Features:
Fault Manager

Disk Space Information (for Installation Target):
- Required: 80,386,515 Bytes
- Available: 816,396,602,430 Bytes

Install Anywhere

- Cancel
- Previous
- Install
SAP® Fault Manager 1.0

Installing Fault Manager

If you are looking for a quick solution to optimize your ASE or Replication Server environment consider an ASE HealthCheck.

The HealthCheck for ASE and Replication Server Service Package is designed to assess the architecture, configuration and operating environment of your ASE and Replication Server deployment so you can attain a high-performing implementation based on best practices.

Working closely with your staff, Sybase consultants will explore production systems to determine if the installed Sybase products are leveraged for their best use.

http://www.sybase.com/support/consulting/products/healthcheck

SAP® Fault Manager 1.0

Configure Fault Manager

Installer has successfully unloaded Fault Manager to the disk. You need to configure it for SAP ASE database always-on option. If you choose not to configure Fault Manager now, you can run "sybdbsm install" to configure it at later time.

Do you want to configure Fault Manager?

- Yes
- No

InstallAnywhere

Cancel

Previous

Next
SAP® Fault Manager 1.0

Cluster ID

Enter the SAP ASE database always-on option cluster ID you want Fault Manager to monitor.

Cluster ID: [Enter]

SAP® Fault Manager 1.0

Failover

For database always-on option synchronous replication, do you want automatic failover to happen if primary SAP ASE is unreachable?

Failover in synchronous mode:

- Yes
- No
Virtual IP for SAP ASE

Enable SAP ASE Virtual IP
- Yes
- No

Virtual SAP ASE host name [antgonminx43x dhcp pgesrev]

Virtual SAP ASE port [5000]

Network interface [eth0]

Internet protocol version [ipv4]

ASE Cockpit

If you want to use ASE Cockpit to manage SAP ASE database always-on option, enter the port numbers to the Cockpit you have setup on primary and companion sites.

Do you want to use ASE Cockpit to manage SAP ASE database always-on option?
- Yes
- No

primary Cockpit TDS port [4998]

companion Cockpit TDS port [4998]
SAP® Fault Manager 1.0

Replication Management Agent on Primary

Enter the Replication Management Agent you have setup on primary site.

RMA IDs port 7001

InstAllAnywhere

Cancel Previous Next

SAP® Fault Manager 1.0

Replication Management Agent on Companion

Enter the Replication Management Agent you have setup on companion site.

RMA IDs port 7001

InstAllAnywhere

Cancel Previous Next
### SAP® Fault Manager 1.0

#### Fault Manager Ports

<table>
<thead>
<tr>
<th>Port Description</th>
<th>Port Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fault Manager heartbeat to heartbeat port</td>
<td>13797</td>
</tr>
<tr>
<td>Primary Fault Manager heartbeat port</td>
<td>13777</td>
</tr>
<tr>
<td>Companion Fault Manager heartbeat port</td>
<td>13787</td>
</tr>
</tbody>
</table>

#### Secure Store Directory

Enter the directory where to put the secure storage.

<table>
<thead>
<tr>
<th>Secure Store Directory</th>
<th>Browse</th>
</tr>
</thead>
<tbody>
<tr>
<td>/work/lub/ept/sap/FaultManager</td>
<td></td>
</tr>
</tbody>
</table>
SAP Host Agent user password is the password to which you reset it by running "sudo passwd sapadm" at OS
Fault Manager Status

Cd /work/liub/opt/sap/

Source SYBASE.csh

Cd FaultManager

[liub@abrep FaultManager]$ sybdbfm status

fault manager running, pid = 31395, fault manager overall status = OK, currently executing in mode PAUSING

*** sanity check report (2970)***.

node 1: server vantgvmlnx437.dhcp.pgdev.sap.corp, site Fremont.

db host status: OK.
db status OK hadr status PRIMARY.

node 2: server vantgvmlnx436.dhcp.pgdev.sap.corp, site Dublin.

db host status: OK.
db status OK hadr status STANDBY.

replication status: SYNC_OK.

[liub@abrep FaultManager]$