IBM Software Demos Tivoli Composite Application Manager for SOA

Business View through Drill down to problem

Introduction

In this demonstration you will see how the integration between Tivoli Business Service Manager (or TBSM), IBM Tivoli Composite Application Manager for SOA (or ITCAM for SOA), and Tivoli OMEGAMON XE for Messaging can help your operations team achieve faster problem resolution in your SOA environment with only a few clicks.

Demonstration

We begin the demonstration by viewing a business Service called "Customer Lookup Service". Tivoli Business Service Manager (or TBSM) includes all SOA Components including Message Broker Flows and Services for an Online Travel Application. The SOA Components are for a Business Critical Application that looks up names of high profile customers in a database and are monitored by ITCAM for SOA. The Message Broker Runtime is being monitored by OmegamonXE for Messaging

As you can see, one of the icons representing a business service has turned red, indicating that it is performing slowly but not yet violating any Service Level Agreements (or SLA's).

Now we'll open the business service to see what is causing the problem.

We can see that the fault lies with a particular component called "MessagingMonitor" within the services supporting the Customer Lookup Business Service.

From this Business Service, we can select the failing resource and right-click on the server CICSEG which is hosting the service, to link to a monitoring product to see what might be causing this problem.

In this menu, as you can see, there is a link to the monitoring product ITCAM for SOA, a member of the IBM Tivoli Composite Application Manager family, which manages and controls the Services layer of IT architectures and is the key to SOA Management.

By selecting the link to ITCAM for SOA, we can access the Tivoli Enterprise Portal in context of this specific resource. This will display general status about the service selected on the appropriate resource within the physical navigator of the IBM Tivoli Monitoring (ITM) environment.

This view gives a summary of the information provided: response time, number of messages, and related information.

The performance summary workspace is now displayed. You can see that the performance of this individual message flow (Messaging Monitor) is the issue(We have a situation that has fired called MessageBrokerUsageLow). We then link from the performance summary workspace that shows the messaging monitor flow to the Service-Service Topology of ITCAM for SOA.

Here we see the Service-Service Topology that shows the service flows in your environment filtered by the application server CICSEG. In the Aggregate view we see a problem with the lookupcustomer operation which is part of the message broker flow "Messaging Monitor" Double clicking on the aggregate lookup customer brings up the instance view in the lower pane that shows the actual situation "Message Broker Usage low"

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Since we see that the performance of the component is degraded and we know that the component (message flow) runs on Message Broker we will now link from the Service-Service topology Instance view of ITCAM for SOA to Tivoli OMEGAMON XE for Messaging .Here we can evaluate if there is any problem with the runtime that may be causing the problem as detected by ITCAM for SOA. OMEGAMON XE for Messaging is a Tivoli monitoring agent which proactively monitors and manages WebSphere MQ, WebSphere Message Broker, and WebSphere InterChange Server environments.

Hovering over the Situation icon shows us there is a situation that has fired and tells us that message broker has gone down. Clicking on the supporting server reveals more information about this service. From the OMEGAMON XE for Messaging view we can see that there is a problem with the Message Broker that is supporting the service. This allows the operations team to take action and start the broker again which clears all situations. The operator can easily start this message broker via the take action drop down. Once the action is complete we see that the status of the broker changes to started.

We now return to the TBSM view and, as you can see, the business Service has returned to normal. The problem was fixed in WebSphere Message Broker which cleared the situations, so the business service is back up and the icon is again green.

The service never slowed down enough to violate the SLA's, and due to a clear understanding of the business impact, the most important issues are cleared up before the customer reports them.

Conclusion

As you have observed in this demonstration, the seamless integration provided by the Tivoli suite of monitoring products allows your operations team to effectively manage an SOA environment from the business service to the underlying resources.