

IBM Software Demos

WebSphere Virtual Enterprise - Health Policy

HEALTH POLICY

In this video, I'm going to show how you can use WebSphere Virtual Enterprise, monitor the health of your applications and application servers. In order to set-up a health policy, you navigate into consults to operational policies, but health policies. I'm going to create a new health policy to detect memory leaks. I'll name that memory leak.

I'm going to use in this case, one of the predefined health policies that WebSphere Virtual Enterprise understands. In this case, the memory leak policy. I'm going to select next. I'm going to use a standard detection interval for that policy. And then when this condition takes place, the administrator will be notified, both in the console and via e-mail, and I can take additional actions.

So in the case of the memory leak, I'm going to go ahead and accept the default actions to take the (heat) dump, and then restart the server, so that we can clear-up the memory leak condition. The restart of the server is done in a smart way, to maintain application availability.

So if I click next, I can then select which servers this policy should apply to. So I'm going to go ahead and make this policy apply to all the servers in my cell. So I'll select cell, and then move my cell over into the member. So this means this policy will apply to all servers within the cell. Hit finish, and the policy is created.

As we can see, this application server is leaking memory, but it's going to take awhile for it to leak enough memory to be a concern. I'm going to pause the video while the leak continues, and then once it gets to the point of getting near to completely full, I'll resume the video, so we can see how WebSphere Virtual Enterprise has (detected) the situation.

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Here, we can see the memory leak was detected by WebSphere Virtual Enterprise, and works were brought to the top of the admin console. In addition, e-mail works were sent out to the administrator. You can see that a replacement application server was started up for the application server that had experienced the critical ((inaudible)) error, and the application was able to maintain that full availability.

Now, let's go ahead and create a custom policy to monitor my database connections. And so let's name this policy, database connections. And I'll use the custom health condition. So I'm going to use the Subexpression builder to build-out the expression for this custom policy.

So I clicked on Subexpression builder, and I get a folder UI, which allows me to select some metrics and other operations within the environment, that can be used as part of the custom health policy, and these expressions can be combined using logical operators.

So, in this case, I'm going to use a TMI metric, since the last reported interval, connection pool module, and the metric I'm going to look at is the average use time. So if my database connection is used for more than, let's say, 2,000 milliseconds, then I want to alert the administrator, because for some reason my database is responding slowly and my queries are taking too long. So I'll click generate Subexpression, and append that to the policy.

Then I can select actions to take. In this case, I do not want to restart the server, so I'm going to remove that action. And let's add an action to take a thread dump. See what part of the application we're running in when the database connections are not being returned in a quick manner. You can also set-up custom actions to take.

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Once again, I hit next, and I'm going to select that this policy should apply to all servers and myself. Click finish, and the policy is now in effect. After I've saved changes, the policy will immediately be active within my cell.

END