

# IBM Software Demos

## Tivoli Business Continuity Process Manager

### **Demo Overview: IBM Tivoli Business Continuity Process Manager V7.1**

#### **I. Main overview that leads to menu**

Do you sleep well? Are you sure that your disaster recovery plan is tested and actually executed when disaster strikes?

The new Tivoli Business Continuity Process Manager ensures successful recovery via pre-tested automated processes so that it can be handled by less-skilled operators. Management is informed through automatic alerts or can approve execution of the recovery plan. In combination with the IBM Geographically Dispersed Parallel Sysplex (or GDPS) and our end-to-end automation you can focus on recovering your business rather than your platform technology.

Would you like to sleep better?

Do you require answers to questions like:

- Would you like to focus on recovering your business rather than your platform technology?
- Are you able to simulate disasters or significant outages with reasonable test coverage and minimal impact to the active production?
- Is auditing the efficiency of the disaster recovery plan important to you?
- Are you required to benchmark or rehearse business recovery and document compliance to regulations?
- Do you need to automatically notify management to approve the recovery plan?
- Do you want to enforce execution of your recovery process like it was planned and tested?
- Would you like to ensure successful recovery via automated, pre-canned, pre-tested processes that can be handled by less-skilled operators?

Then have a look at the new IBM Tivoli Business Continuity Process Manager V7.1 (in the following abbreviated with BCPM) which helps to automate the key processes required to identify and recover critical business systems as quickly as possible when an outage occurs in order to reduce the cost to the business.

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When disaster strikes, the right recovery plan that will re-establish service continuity needs to be selected, approved and executed as fast as possible.

BCPM helps creating, testing and enforcing this process by

- Creating recovery plans
- Creating and executing a Disaster Recovery Workflow that is used by people in roles like analyst, approver or manager etc.
- Access to the configuration database for context information
- And more like notification and integration with operational products

### **II. Menu item “Improve crisis management”**

Many clients still do crisis management based on documentation.

Here we have Geographically Dispersed Parallel Sysplex (GDPS) as disaster recovery solution and products like NetView and Tivoli System Automation for Integrated Operations Management (SA IOM).

When GDPS detects a disaster, it issues the GEO112E takeover prompt that contains details about the failed components and options for recovery.

An operator needs to read this message and notify members of the crisis team, possibly via phone.

The crisis team urgently needs to gather information and to find out what has failed, what the right recovery procedure is, who needs to be informed, who needs to approve and so on ... all this based on documentation, manual investigations, and phone-based communication.

Successful recovery is at risk due to communication problems and accidental deviations from the pre-planned process because there were no drills – and worse, because crisis and context information is not readily available.

With Tivoli Business Continuity Process Manager crisis management will be faster and more reliable through automation, process management, and integration with CCMDB and other products.

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The GDPS GEO112E takeover prompt is picked up automatically by NetView, and BCPM parses it to find out about the failed components and options for recovery.

BCPM automatically creates a work order that contains context information and links to the CCMDB.

A couple of notifications go out immediately:

- The role of the ITSC analyst is notified and gets a task assignment that the outage situation must be investigated, and ...
- the crisis management team is notified to support outage analysis and decision making.

The main goal for the analyst is to find the most appropriate recovery procedure for the current situation. To achieve this, he can look at history information to find out what worked in earlier situations, he can launch into operational management products, such as Tivoli Enterprise Portal or IBM Tivoli Monitoring (ITM), or use the linked configuration item to analyze what applications are affected. Finally, he selects the most appropriate recovery plan and option from the pool of pre-planned information.

The work order is passed along to the approver and manager. Everyone has access to the same information as well as special start centers provided according to the user's role.

BCPM uses email notification and can use SA IOM to notify users when disaster is declared and the recovery procedure starts.

To document a client's business continuity readiness and to train people executing the business continuity process, BCPM provides the means to simulate disaster situations.

BCPM provides the notion of a test plan that allows customers to trigger messages and work with data in a "simulation mode" without affecting their real environment.

This can be used to test the establish recovery procedures as well as perform drills... drills both to train staff and to create data that can be used to improve the process.

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### **Conclusion**

In conclusion, IBM Tivoli Business Continuity Process Manager allows you to test and document your organization's readiness to respond to major incidents and disasters.

When disaster strikes, BCPM helps you to select the right disaster recovery plan and to execute it as planned.

Would you like to sleep better?

Then please have a look at the accompanying demonstration.

### **BCPM Demo**

#### **Introduction**

Welcome to the demo of IBM Tivoli Business Continuity Process Manager, or "BCPM", version 7.1. In this demo, we'll show you how to create a recovery plan to capture all knowledge about your IT infrastructure, the people, processes, and plans that you have in place. Then we'll show you how to use a test plan to simulate an outage situation. Finally, we'll walk thru the workflow that BCPM provides to see how outage situations are handled using BCPM.

Since BCPM is based on the IBM Tivoli Change and Configuration Management Database (or "CCMDB"); we'll assume that you are already familiar with the basic concepts of CCMDB, the IT Infrastructure Library (or "ITIL"), the IBM Tivoli Unified Process (or "ITUP"), and the IT Service Continuity process.

For now, let's assume that you've already collected the information described by ITIL for IT Service Continuity planning. This information is needed to implement BCPM, adapt the workflow, and create a recovery plan.

The person in charge of creating recovery plans is the ITSC Manager, which is in line with the role responsibilities that ITUP recommends for supervising the Continuity Process. We'll log in to CCMDB with a user account that has the ITSC Manager role assigned.

#### **Demonstration**

What you see here is the custom Startcenter for an ITSC Manager. Among other things, it shows links to the applications provided by BCPM: the Recovery Plan application, the Test Plan application, and the Work Order application.

First let's navigate to the Recovery Plan application and create a new recovery plan.

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#### **Create a recovery plan with auto-approval**

We start by specifying some basic details for the recovery plan. We name it "DM\_REC\_S", we give it a description, and we specify the owner of the plan.

When this recovery plan is selected to provide the recovery procedure in a real outage situation, it might be necessary to get the decision explicitly approved. You can do this by specifying an approver role that gets the task assignment before the actual recovery procedure can be started. For this demo, we'll skip this feature so we don't need to specify an approver role. Instead, we'll enable auto approval.

Now let's take a look at some other features: To speed up the process of finding the right recovery plan in an outage situation, the recovery plan can be associated to various objects such as Configuration Items that represent business systems, disks, hardware boxes, and so on. It can also be associated to specific locations or sites.

Furthermore, a recovery plan can be classified according to its intended use; for example, for disk outages, or for system outages, and so on.

You can also specify recovery options that clarify what is actually done when a disaster has been declared. Recovery options can take the form of simple actions, complete workflows or job plans. When using a recovery plan in a particular situation, the set of options available is the superset of the options provided by the recovery plan plus the actions that are supplied by the Operational Management Product in the outage event message. The recovery plan provides the execution context for all of these options.

You may also want to specify communication templates for the recovery plan. The communication templates describe who is notified with what information at key moments such as when a disaster is declared.

Finally activate and save the recovery plan.

#### **Trigger the short demo scenario**

When you have successfully created one or more recovery plans, you are ready to handle outage situations. However, to test and verify that the plans are correctly implemented and the recovery procedures work properly, you may want to simulate events before real events come in.

To do that, let's navigate to the test plan application to simulate an outage message.

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BCPM ships with a set of demo data that can be used for training and demonstration purposes. Included in this demo data is a test plan named "DM\_TEST1". This test plan is used for the current demo.

Also, several samples of possible trigger event messages have already been captured. You see all available messages on the "Message pool" tab. We'll use one of these messages - the system outage message "DM\_SYSTEM1" to trigger the BCPM workflow.

To run a test, a new test instance "DM\_MYTEST" is created. In the test instance, you can specify the level of simulation. In this demo, all activities are going to be simulated, so none of the available checkboxes should be selected.

To trigger a message, click the "Send message" button and select one of the available messages.

The message is sent to BCPM as though it had been sent by the real infrastructure.

It is important to mention that although BCPM in its first release implemented out-of-the-box capabilities to support Geographically Dispersed Parallel Sysplex (or "GDPS"), BCPM is not restricted to nor requires GDPS. The demo shows how a GDPS GEO112E message triggers the BCPM workflow, however, this scenario could easily be adapted to any other system event or underlying software.

As soon as BCPM receives the message, a work order is created, then the BCPM workflow is initiated, and then the incoming message is automatically parsed and evaluated. As part of the evaluation process, information is retrieved from the message and is stored in the work order for later use. Information retrieved in this way includes the symptom (such as system, disk, cluster outage, etc.), the failing Configuration Item, if known, and the recovery options provided by GDPS in the GEO112E message.

Based on this information, some actions are performed automatically by the BCPM master workflow; for example, notifications are sent out to the crisis management team, and the task is assigned to the right Subject Matter Expert based on the information retrieved from the actual message.

Based on this automatic analysis, a subsequent manual analysis step is initiated.

#### **Analyze the outage**

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As just mentioned, the ITSC analyst will have received an email requesting an outage analysis task to be performed. To see what this involves, let's now log in using the "pmbcmanlst" account.

Here you see the predefined Start Center for the ITSC Analyst role. As you can see, the ITSC Analyst has a task assignment in the inbox. The task assignment is pre-filled with information that has been retrieved from the incoming message. The details in the task assignment show that a system outage triggered the workflow.

Let's take a closer look at the work order and do some outage analysis.

The BCPM work order application provides specific views for the different roles that work with it. In the current case, the analyst has access to all information and tools necessary to determine what is impacted, what the objectives and policies are, whether the outage represents a crisis, and so on.

The integrated tools are available via a group of launch commands on the "Select Action" menu.

Furthermore, detailed queries can be performed on the originating Operational Management Product. When you click the "Get Originator Details" button, a set of properties is returned reflecting the current state. One of the most important pieces of information from GDPS is the freeze policy.

The main goal of the analysis step is to find the most appropriate recovery plan for the current situation. Based on the information shown and more information retrieved from the systems using the tools that are available, the analyst process involves searching for and selecting a recovery plan. You can filter recovery plans based on information that was entered when creating the plan; that is, during the planning phase. For example, since the current event is a system outage, let's show only recovery plans that are classified for system outages. After selecting a plan, we need to decide on the right recovery option. For this demo, let's just select one of the options offered by GDPS. This option involves simply replying to the message on the operator console; as you will see later in this demo, this action is fully automated.

After selecting the recovery plan and option, the analysis task is done. We now route the workflow for further processing.

#### **Declare the disaster**

The next role to get a task assignment is the ITSC Manager who declares the disaster and triggers the execution of the recovery procedure.

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Upon receiving an email with instructions for the task that has to be performed, the ITSC Manager logs in to CCMDB.

Typically, the ITSC Manager does not need to do more than route the workflow. This action is effectively "pressing the emergency button" which causes the recovery procedure to be started. Simultaneously, notifications and alerts are sent out as specified in the recovery plan to inform staff and users that their business application may not be available for a certain amount of time.

In general, the recovery procedure may consist of several steps including further task assignments to Subject Matter Experts handling specific tasks necessary for recovery. To keep this demo simple, we'll assume a fully automated recovery procedure that requires only that a reply to the GDPS message be sent.

However, the results must be verified. Therefore, after the ITSC Manager has declared a disaster and routed the workflow, the Continuity Provider gets a task assignment to perform this necessary verification.

#### **Verify the recovery**

The Continuity Provider has the same capabilities as the ITSC Analyst, and uses the information provided in the work order together with the integrated tools to evaluate the systems and decide whether the performed recovery procedure delivered the desired outcome. Finally, the Continuity Provider completes the workflow.

#### **Conclusion**

In summary, we've taken a look at how BCPM supports the planning aspect by capturing information and creating recovery plans and options.

We've seen the way BCPM supports testing and simulation through a tailorable simulation environment which allows you to run fire drills or training sessions without impacting or requiring a real environment.

We've seen how BCPM assists in handling outage situations by structuring and automating the required tasks via work management and recovery plan.

But BCPM provides even more: Various reporting capabilities are provided to show the availability of plans, the performance of recovery procedures, and much more. Such reports and Key Performance Indicators can be used for auditing purposes as well as to improve existing processes.

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Furthermore, detailed logs about test runs are available. Using the information from these logs, you may, for example, monitor test runs.

In conclusion, IBM Tivoli Business Continuity Process Manager makes you better prepared to handle disaster situations.