# SAP BCM – Business Communication Management

## Disaster Recovery Procedure

Public

# Objective

The goal of this informational document is to assist the user in gaining a better understanding on best business practices when preparing for any eventuality.

# Introduction

The concepts and steps provided in this documentation are intended to give you a basic understanding of the most common practices and procedures that could help minimize any impact that could cause potential downtime due to the loss of data/system failure.

# Backing up Servers

**Export the following registry keys under key HKEY _LOCAL_MACHINE\SOFTWARE:**

- Wicom
- ODBC

**Back up the following directories containing system related software and files:**

- The infrastructure software (by default in C:\Program files\SAP\BCM)
- Files of all virtual unit instances (by default in C:\Program files\SAP\BCM\VU)
- SAP BCM software installation packages (by default in C:\Program files\SAP\BCM\Install)
- System databases. Take a complete SQL back-up copy with SQL Server Management Studio
- All special directories that may have been configured to another location than defaults (check on each virtual unit

**Application Backup**

- Standard and customized prompts
- Voicemail recordings folders
- Call recording folders
- Folders for sent and received faxes
- CPM attachments folders
- Outbound folders
- Logs

**Additional Data that may require backing up**

When the server constrains web sites hosted by Microsoft IIS, these web sites and associated application pools should also be taken into account. If Microsoft IIS is reinstalled, the sites and application pools are also removed. The web sites can be recreated using VUA, but any custom settings on them should be reapplied manually. For all other third party application and or hardware (such as PSTN Gateways, Hard Phones, SIP Gateways etc)  please refer to these third party documentation respectively on how to do their disaster recovery.

# Backing Up and Restoring Virtual Unit Instance

1. Copy the home directory of the virtual unit. By default the directory is C:\Program Files\SAP\BCM \ VU\<virtual unit name>. **Do not** save the copy to the same directory with other virtual units since it causes malfunction in the VUA tool.

2. Copy the virtual unit's registry key recursively from HKLM/Software/Wicom/<virtual unit name>.

3. If the virtual unit contains a Microsoft SQL Server database, backup the database.

**Restoring Virtual Unit Instances**

- Make sure the virtual unit instance is inactive on the server.
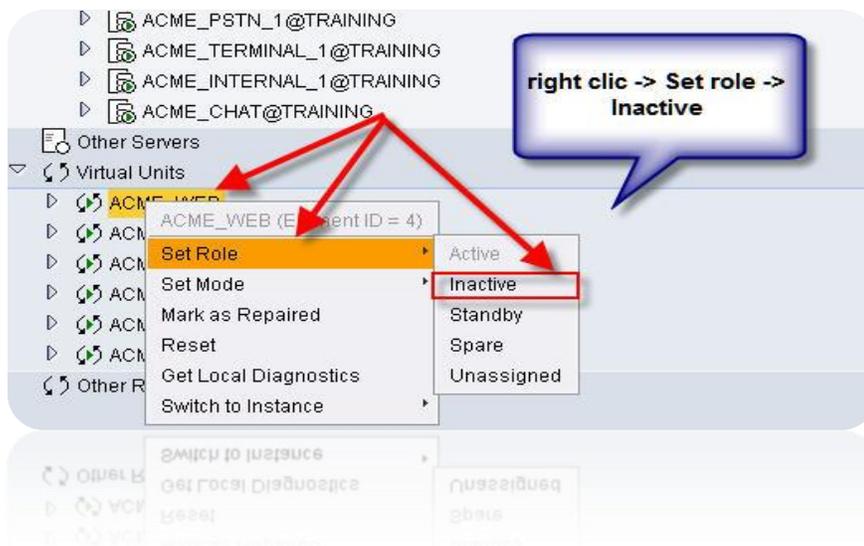


- Restore the home directory of the virtual unit from backup. By default the directory is C: \ Program Files\SAP\BCM\VU\<virtual unit name>.

- Restore the virtual unit's registry key in HKLM/Software/Wicom/<virtual unit name> from backup.

- If the virtual unit contains a Microsoft SQL Server database, restore the database from backup.

- If the virtual unit contains Microsoft IIS web sites or ODBC data source names, recreate these using VUA. Upgrading the virtual unit to its current base installation causes the files, registry entries and web sites to be set or recreated properly.

# Backing up the Applications

A BCM system landscape can be copied entirely or partially with export and import functions of Virtual Unit Administrator (VUA) and Infrastructure Administrator (IA) tools.

The host system is managed in VUA (Virtual Unit Administrator) which consists of virtual units where the software packages are installed. Exporting and importing the host system, or part of it, copies the software structures and installation variables.

The system model managed in IA (Infrastructure Administrator) which also combines virtual unit instances to physical servers. Exporting and importing the system model enables copying the model of the virtual unit and software component arrangement on similar set of servers as the original has been.
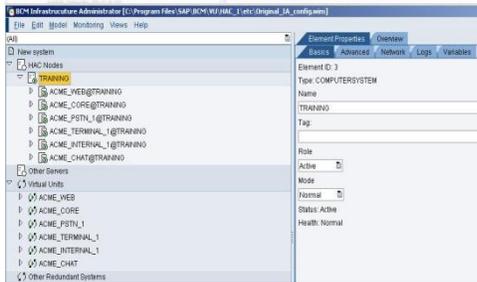
**PLEASE NOTE:**

You cannot import virtual units with the name that already exists in the host system.
If you are copying a customer system to create a similar system for another customer then:

1.  edit the created XML files with a text editor before importing, as also the immutable variable values are imported and they cannot be edited afterwards

2.  Make sure you understand the customer-specific values listed in the procedure below. This is extremely important in the Software as a Service (**SaaS**) systems where several customers are served in the same service centre. The list of customer-specific variables depends on the system, and the one in the following procedure is an example only.

# How to **make a backup of the entire BCM System**

1. Export the host system in VUA:
   a) Open the BCM system in VUA.
   b) Choose  File --> Export Host System
   c) Define the name and folder for the host system definition file.

2. If you copy the system on servers other than original ones, change the node names in the host system definition file:

   a) Open the host system definition XML file in a text editor.
   b) Find and replace each HAC node name and HAC node server address with the corresponding ones of the new servers.
   c) Save the host system definition file.

3. Make sure that user accounts for HAC Administration Users have local administrator rights in the new servers as well. You can also change the users by editing the host definition XML file.

4. To import the host system in VUA, choose File -> Import Host System to import  the file exported above.

5. Export the system model in IA:

   a) Open the BCM system model in IA. The model can be in offline or online mode.
   b) Choose -> File ->Export System Model.
   c) Define the name and folder for the system model file. It can be saved as a .WIM file or an XML file.
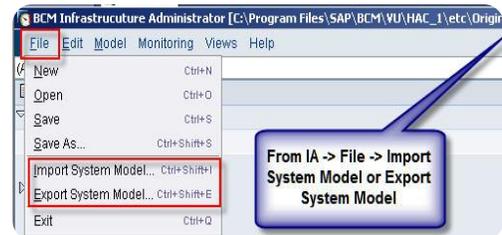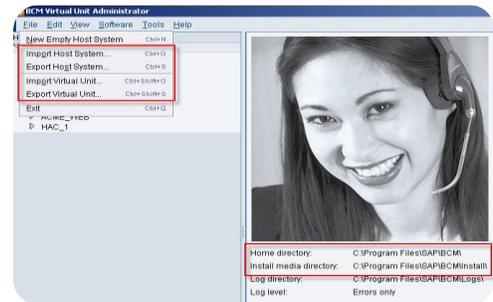
6. To import the system model in new environment, open IA and choose ->  File ->  Import System Model and the appropriate file.

7. Choose the HAC node elements and change the HAC node names, server names, IP addresses and HAC trace log directories for all servers of the system model.

8. Save the model.

9. Start the HAC service on each server in the MS Services view. The name of the service is the **SAP BCM HAC** [NODENAME].

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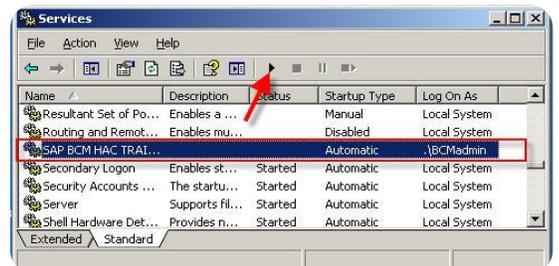
# Using Export and Import for Making New Systems

You can create new customer systems by copying the existing system entirely or partly.

**Tips and Tricks:**

- copy the host system, or parts of it, in VUA, but to build a new system model from the beginning in IA.
- create a system that consists of a subset of a larger system, you can export and import entire system model in IA, and delete the unnecessary virtual units.

**Here is how to do this:**

**Copy the Host Systems in VUA**

a)  Open the BCM system in VUA.
b)  To export the entire system, choose-> File ->  Export Host System , or to export one virtual unit, choose ->  File ->  Export Virtual Unit, and define the name and folder for the definition file.
c)  To make a new customer system from an existing one, open the definition file (XML file) in a text editor and change the values of the following customer-specific variables. Variables can be in different virtual units so if you are using separate definition files for virtual units, make sure you change them accordingly in all of them.

**CAUTION -**

Immutable variables **cannot be changed** in VUA after they have been imported to the system.
For all virtual units:
-   Virtual unit name. This name is repeated several times in the folder paths, and replacing may take several minutes.
-   IP address of the virtual unit.