

Increase Your Efficiency and Security

Blue Copy Suite

Turns your System Copy Process into a No-Brainer!

Blue Copy Suite optimizes and automates SAP's standard processes for system and client copies and enhances these substantially with additional functionality.

- With the **Blue Copy Suite** you can copy SAP-Systems both with **Abap-** und **Doublestack**
- **OS UserExits and SAP UserExits** give you the possibility for individual automation steps, i.e. starting the transaction BDL5
- Maximum of automation and save operation through intuitive **graphical user interface (GUI)**
- Errors are excluded by a preventive **resource check** making sure enough resources are available
- **Automating** all necessary steps saves time, prevents mistakes and makes for satisfied customers and users.
- With **table backup** prior to the copy you can save (and restore) table settings on your target system which you otherwise would have to correct manually after the copy

Benefits of Blue System Copy

Using **Blue Copy Suite** brings numerous benefits to your company

- **Cost savings** through a high rate of automation: system or client copies are setup during business hours and are run at predetermined times, e.g. overnight. This saves costs because night work or over time is not required
- **Continuous high quality:** automating all steps allows copy jobs to be identical. None of the steps are omitted by accident
- **Improved quality assurance process:** by significantly reducing the amount of time required for copy jobs, data refresh can take place more often without significantly increasing personnel cost
- **Flexibility** as ad-hoc copies can be scheduled on the fly and can be run either there and then or at any other predefined time
- **Avoiding errors prior to running the job:** plausibility and resource checks are run while schedule and just before running the jobs.
- **Detailed Logfile:** all activities are logged in a single file. This serves as a complete documentation, but also as a single source of trouble shoot analysis.
- **Reduced hardware costs:** The amount of data copied can be reduced significantly

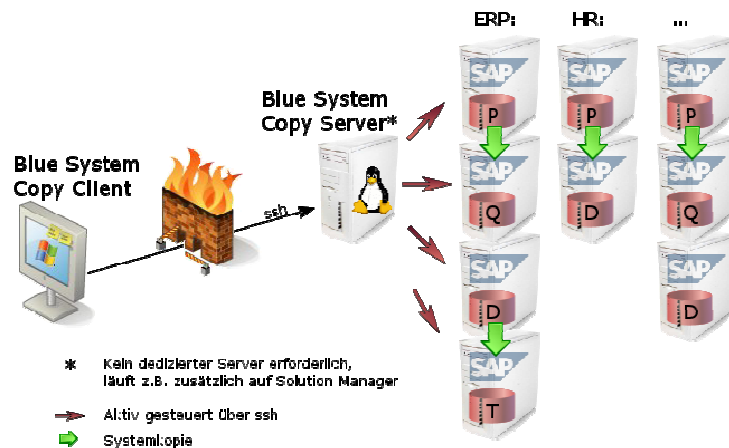
Key Features of Blue System Copy

Blue System Copy provides the following key features

- **Push-button Copy:** schedule your jobs within minutes and run them without intervention by administrator, e.g. overnight including all post-processing.
- **Preparation, Cleanup and Post-processing** recommended to be done by SAP are to a large extent **carried out automatically**.
- **Table Back-up:** Settings you want to keep on the target system are backed up prior to the copy job and automatically restored afterward.
- **Faster copy jobs** by running the individual copy processes simultaneously.
- **Copies from backup** and even **flash copies** are also supported (next to direct copy from the source system)
- **OS UserExits and SAP UserExits** allow including of individual automation requests at operating system level as well as on R/3-Level, i.e. starting BDLS or email notification.
- An **intuitive and user-friendly GUI** provides operating safety and avoids handling errors.
- **Restart upon error:** in the unlikely event of an error the job can be restarted at the exact point of error.

Logical diagram of the individual components

Log on to the client to enter the parameters for the copy job or the post checks of your system or client copy. The client already holds the information you are looking for or connects you to the server, retrieves current information and presents it clearly on the GUI.



The Components

Blue System Copy is based on Client/server-technology. The server part of the software is installed on the database server and operates all other involved servers.

The client component (GUI) is installed on the SAP administrator's desktop PC. Its task is to set up the system copy jobs and to administrate all the system copy jobs.

The Graphical User Interface

The GUI is an integral part of **Blue System Copy**. It makes using the tool user-friendly and simple. Errors in operating it are close to impossible. The GUI never leaves the SAP base Administrator alone. Instead it offers direct and to the point assistance, in any situation.

Source	Target	Status as of	Status Text	Remarks
SM1	SMX	25.06.2008 17:13	Die Systemkopie wurde erfolgreich durchg...	
PSM	QSM	03.06.2008 17:55		bin582-8 jai700p online-Kopie UE J2ee-Config
PSM	QSM	31.05.2008 00:04	System copy finished successfully.	bin582-8 jai700p online-Kopie UE J2ee-Config
P09	Q09	31.07.2007 23:31	Checks started	Test 5.8.1-7 AIX
PSM	QSM	24.07.2007 01:35	Tried to start the unopened source databa...	Test 5.8.1-6
P09	Q09	15.05.2007 03:27	Please start the restore NOW!	Test 5.8.0-29 AIX
PNX	KNX	08.06.2006 14:05	Scheduled: job 95 at 2006-06-08 19:00	PNX=>KNX
PS1	KS1	07.06.2006 16:22	Simulation run finished successfully without...	PS1 => KS1

With the **Job List** you keep track of every copy job at any time, including their current states. Sort and filter the view to your needs to see only information that is important to you. The view can be sorted i. e. by customer or project. It allows you to run and supervise various copy jobs in parallel on different systems.

Templates and Copying Jobs

To save as much time as possible when scheduling a new copy you can create a new job either:

- By using an existing copy job or
- By creating a new job from a template

Creating a **copy from another job** is simple:

In the Job List-view, just select an existing copy job and click on the button 'New Job'. All parameters are taken from the selected copy job. Change any parameter you like, as necessary. When finished, just click on the button 'Schedule' and enter the execution time – and you are done.

Alternatively use the button 'Job Administration' to create a set of **templates** for various system copies once and to adapt them individually.

Use function 'archive' to move old copy jobs from the Job List to the archive, e.g. for audit purposes.

Help and Assistance whenever you need it

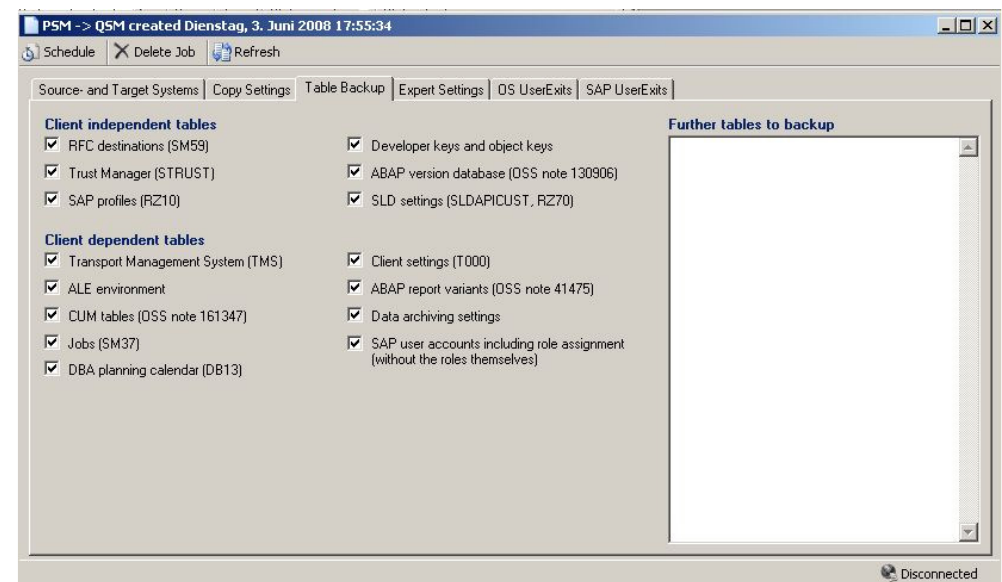
The Button 'dynamic help' provides context-sensitive help and tips for each entry field. As the help documents are coded in HTML you can create your own customized help texts. This will allow you to build-in your own corporate design or to allow for customer specific entry values like SAPSID, host names etc.

As the program provides you with an omni-present help function, consulting the manual should no longer be necessary; even if you are a first time user, or rarely use **Blue System Copy**.

Table Backup

Typically in recurring system copies, manually adapting tables that in some way refer back to the production system is characterized by a high amount of effort and is error prone. Under extreme circumstances, for instance, RFC connections in the QA system that are still pointing at the production system after running a system copy, can destroy, falsify or even delete production data.

Blue System Copy can remedy this by saving a table backup in a file prior to the copy job and automatically restoring it after the copy.



The table areas on the screen shot – each one consists of several tables – are saved automatically by a click.

Additionally you can configure as many table back-ups as you want, including of course your own customized tables.

UserExits

Integrate individual automation steps using so called userexits (customized scripts). **Blue System Copy** distinguishes between two kinds of userexits:

1. SAP UserExits

These exits should be used for any action with an SAP-System.

Source- and Target Systems Copy Settings Table Backup Expert Settings OS UserExits SAP UserExits										
	Active	Exit#	Client	ABAP-Report	Variant	Host	Auth-User	Result Type	Res. Val.	Remarks
	<input checked="" type="checkbox"/>	8811	001	RSADRCK2	STDSCOPY	Target S...	DDIC	Job status	Finished	user backup 1
	<input checked="" type="checkbox"/>	8812	001	RSADRCK1	STDSCOPY	Target S...	DDIC	Job status	Finished	user backup 2
	<input checked="" type="checkbox"/>	8813	001	RBDLSMAP	PSMQSM	Target S...	DDIC	Exec.-Ti...	10	BDLS part 1
	<input type="checkbox"/>	8814	001	RSADRCK2		Target S...	DDIC	Exec.-Ti...	10	user backup error
	<input type="checkbox"/>	8815	001	RSADRCK1		Target S...	DDIC	Exec.-Ti...	0	
*	<input type="checkbox"/>									

Examples:

- Starting BDLS
- Starting a clearing job: clearing up user addresses
- Starting a saving job: for conigma CCM, for conigma qcopy, for conigma devsync or for the transport manager from realtech

2. OS UserExits

These exits should be used for any action to be done upon operating system level:

Source- and Target Systems Copy Settings Table Backup Expert Settings OS UserExits SAP UserExits										
	Active	Exit#	Command Line	Host	User	Result Type	Res. Val.	Remarks		
	<input checked="" type="checkbox"/>	4520	bscj2eeexp.sh	Target DB	non root	Returncode (<=)	0	save J2EE-Config		
	<input checked="" type="checkbox"/>	8720	bscj2eeimp.sh	Target DB	non root	Returncode (<=)	0	restore J2EE-Config		
	<input type="checkbox"/>	6410	bscrestore	Target DB	non root	Returncode (<=)	4	Restore Database		
	<input type="checkbox"/>	2561	bscstop	Target DB	non root	Returncode (<=)	4	stop cluster		
**	<input type="checkbox"/>			Target DB	non root	Returncode (<=)	0			

Examples:

- Starting a restore job from tape
- Starting flash copy or snapshot
- Sending emails or sms

The saving of the J2EE-configuration is done in an user exit, which is deployed by Empirius. This exit can be used as a template for your individual exits.

Based on the modularity of **Blue System Copy** user exits can be integrated at many different steps during the copy job.

The contents and results of user-exits are each customer's own responsibility.

Job Scheduling and Resource Checks

Scheduling a copy job can be on the fly or at any later moment.

The copy job will be checked for plausibility immediately when setting it up, and if deferred, also just before running it. This includes wide ranging resource checks to determine if the job can in fact run successfully. The checks include, among others:

- Accessibility of participating systems
- Sufficient disk space on target system
- Matching Oracle versions

The administrator can close the GUI after successful scheduling; the copy job will run automatically without user intervention (provided certain activities do not require the user, e.g. copy from tape). This means also that the copy job will continue to run independently from the GUI, even when the connection between the GUI and the server is broken by e.g. a firewall timeout.

Logfile

Check the results of your system copy on your desktop. Click tab 'Logfile' and you can monitor in great detail the exact progress made while the copy process is still ongoing. For improved readability each section is separated by a horizontal line and different message categories are colored individually.

The screenshot shows a window titled 'PSM -> QSM created Dienstag, 24. Juli 2007 01:04:35'. The window has tabs for 'Source- and Target Systems', 'Copy Settings', 'Table Backup', 'Expert Settings', 'OS UserExits', 'SAP UserExits', and 'Logfile'. The 'Logfile' tab is active, displaying a log with the following content:

```

BSCPFE-30000S-20070724 013058 Start der Prüfungen
BSCPFE-00098I-20070724 013059 ANFANG Ausgabe der Umgebung
BSCPFE-00000I-
/basis/bin/bscpfe.sh, Version 5.8.1-6
BSCPFE-00000I-20070724 013100 Gestartet auf:
BSCPFE-00000I-
Linux jai700p 2.6.5-7.201-default #1 Thu Aug 25 06:20:45 UTC 2005 i686 athlon i3
BSCPFE-00000I-
Kommandozeilenparameter:
lang=de-DE clientvers=1.1.11.0 debuglevel=5 cleanup=no debug=exports skipcurrenterror=NO
BSCPFE-00099I-
ENDE Ausgabe der Umgebung

BSCPFE-00098I-20070724 013101 ANFANG Prüfen, ob openssl korrekt installiert ist
BSCPFE-00000I-
Teste Signieren einer Datei
BSCPFE-00000I-
Prüfe die soeben erstellte Signatur
BSCPFE-00000I-
Prüfung erfolgreich. OK.
BSCPFE-00099I-
ENDE Prüfen, ob openssl korrekt installiert ist

BSCPFE-00098I-20070724 013103 ANFANG Testen, ob die beteiligten Remote-Rechner erreichbar sind
BSCPFE-00000I-
Beteiligte Systeme: Lokaler Rechner jai700p und jai700qa
BSCPFE-00000I-20070724 013108 Host jai700qa ist erreichbar, OK.
BSCPFE-00099I-
ENDE Testen, ob die beteiligten Remote-Rechner erreichbar sind

BSCPFE-00098I-20070724 013110 ANFANG Prüfen, ob Remote-Befehle mit ssh ausgeführt werden können
BSCPFE-00000I-20070724 013111 Auf jai700qa konnte mit ssh ein Befehl ausgeführt werden, OK
  
```

At the bottom of the window, there are checkboxes for 'Automatically jump to end of logfile' (checked) and 'Line break' (unchecked), and a 'Level of detail' slider. The status bar at the bottom right shows 'Disconnected'.

This view shows you how **Blue System Copy** stops in case of an error and continues – after the administrator has restarted the job – exactly at the point where the error occurred.

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Supported Environments and System Requirements

Server:

- SAP R/3 Release 4.6 up to Release 7.00
- Oracle and DB2 (MSSQL projected)
- Operating system Windows, Linux or Unix
- OpenSSL
- Ssh-Server

Client:

- Microsoft Windows with installed Microsoft .NET-Framework 2.0
- Ssh-Client

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