# Parallels PBA-S Integration Manual

### Manual for configuration of BackupAgent services

NOTICE: If you are a PBA-S customer, please consider the usage of our APS package in Parallels Plesk Automation as this provides much more features and a better user experience.

### 1. Introduction

This document is a manual to integrate BackupAgent provisioning actions in Parallels Business Automation – Standard (PBA-S). We recommend you to perform these actions with eligible knowledge of PHP and PBA-S.

The scripts were initially built by a Polish business partner of BackupAgent, which explains why some example screenshots contain Polish texts. These will be changed soon.

The script creates groups in BackupAgent. Your customers can then login to the management console with the group login and create the user accounts for the BackupAgent client. Currently it is not possible to create users directly from PBA-S.

## 2. Pre-requirements

To be able to use PBA-S in combination with BackupAgent you need to install the following packages:

- PHP
- PHP-XML
- PHP-MCRYPT
- PHP-SOAP
- PHP-PEAR
- OpenSSL
- PEAR-Mail

### 3. Installation

### 3.1 CentOS

#### 3.1.1 Quick install

• yum -y install php php-xml php-mcrypt php-soap php-pear openssl; pear install Mail

Cleanup : openssl-1.0.0-4.el6.x86_64	15/15
Installed: php.x86_64 0:5.3.3-3.el6_1.3 php-pear.noarch 1:1.9.4-4.el6 php-soap.x86_64 0:5.3.3-3.el6_1.3 php-xml.x86_64 0:5.3.3-3.el6_1.	3
Dependency Installed: apr.x86_64 0:1.3.9-3.el6_1.2 apr-util-ldap.x86_64 0:1.3.9-3.el6_0.1 httpd-tools.x86_64 0:2.2.15-15.el6.centos libxslt.x86_64 0:2.2.15-15.el6 mailcap.noarch 0:2.1.31-2.el6 php-common.x86_64 0:5.3.3-3.el6_1.3	_0.1 centos 1.3
Updated: openssl.x86_64 0:1.0.0-20.el6	
Complete!	
Did not download optional dependencies: pear/Net_SMTP, usealldeps to d automatically pear/Mail can optionally use package "pear/Net SMTP" (version >= 1.4.1)	ownload
downloading Mail-1.2.0.tgz	
Starting to download Mail-1.2.0.tgz (23,214 bytes)	
done: 23,214 bytes	
Install OK: Channel://pear.php.net/Mail-1.2.0 [root@localbost ~]#	

- 3.1.2 Step by step
  - yum install php

Dependencies Reso	lved			
Package	Arch	Version	Repository	Size
Installing:				
php	×86_64	5.3.3-3.el6_1.3	updates	1.1 M
Installing for de	pendencies:			
apr		1.3.9-3.el6_1.2	updates	123 k
apr-util	×86_64	1.3.9-3.el6_0.1	base	87 k
apr-util-ldap	×86_64	1.3.9-3.el6_0.1	base	15 k
httpd	×86_64	2.2.15-9.el6.centos.3	updates	808 k
httpd-tools	×86_64	2.2.15-9.el6.centos.3	updates	69 k
mailcap	noarch	2.1.31-2.el6	updates	27 k
php-cli	×86_64	5.3.3-3.el6_1.3	updates	2.2 M
php-common	×86_64	5.3.3-3.el6_1.3	updates	522 k
Transaction Summa	ry =======			
Install 9 P	ackage(s)			
Upgrade 0 P	ackage(s)			
Total download si	ze: 4.9 M			
Installed size: 1	6 <b>M</b>			
is this ok Ly/NJ:	9_			

• yum install php-xml

6_1.3.x86_64				
> Processi	ng Dependency: libe	exslt.so.0()(64bit) for j	package: php-xml-5	.3.3-3.e
16_1.3.x86_64	1			
> Running t	transaction check			
> Package	libxslt.x86_64 0::	1.1.26-2.el6 set to be uj	pdated	
> Finished	Dependency Resolut	tion		
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libxslt	×86 64	1.1.26-2.el6	base	450 k
	<u></u>		2400	100 11
Transaction S	Summary			
			=======================================	=======
Install	2 Package(s)			
Upgrade	Ø Package(s)			
Total downloa	ad size: 550 k			
Installed siz	ze: 2.4 M			
Is this ok [	ı∕N]: u			

• yum install php-mcrypt

updates Setting up Install Process Resolving Dependencies There are unfinished transactions rer The program yum-complete-transaction > Running transaction check > Package php-mcrypt.i386 0:5.1.6-	maining. You might consider running is found in the yum-utils package. -15.el5.centos.1 set to be updated	yum-complete-transaction fi
> Finished Dependency Resolution		
Dependencies Resolved		
Package	Arch	Versio
Installing: php-mcrypt	i386	5.1.6-
Transaction Summary		
Install 1 Package(s) Upgrade 0 Package(s) Total download size: 16 k		
Is this ok [y/N]: y		

• yum install php-soap

* base: mirro * extras: mir	pr.prolocation.m pror.prolocation	net n.met		
* updates: mi	irror.prolocatio	on.net		
Setting up Ins	stall Process			
Resolving Depe	endencies			
> Running tr	ansaction check	<		
> Package r	ohp-soap.x86 64	0:5.3.3-3.el6 1.3 set to	be updated	
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Package	Arch	Version	Repository	Size
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Transaction Su	ımmary			
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• yum install php-pear

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• yum install openssl

base			13.7 kB 0	0:00
extras			13.5 kB 0	0:00
updates			13.5 kB 0	0:00
updates/prima	ry_db		1654 kB 0	0:01
Setting up In	stall Process			
Resolving Dep	endencies			
> Running t	ransaction check			
> Package	openssl.x86_64 0:1	1.0.0-20.e16 set to be u	pdated	
> Finished	Dependency Resolut	tion		
Dependencies	Resolved			
Package	Arch	Version	Repository	Size
Updating: openssl	×86_64	1.0.0-20.el6	base	1.4 M
Transaction S	ummary			
 Install	0 Package(s)			
Upgrade	1 Package(s)			
Total downloa	d size: 1.4 M			
is this ok Ly	/nj. y_			

• pear install Mail

```
CentOS Linux release 6.0 (Final)

Kernel 2.6.32-71.el6.x86_64 on an x86_64

localhost login: root

Password:

Last login: Mon Dec 12 09:43:51 on tty1

IrootQlocalhost ~1# pear install Mail

Did not download optional dependencies: pear/Net_SMTP, use --alldeps to download

automatically

pear/Mail can optionally use package "pear/Net_SMTP" (version >= 1.4.1)

downloading Mail-1.2.0.tgz ...

Starting to download Mail-1.2.0.tgz (23,214 bytes)

......done: 23,214 bytes

install ok: channel://pear.php.net/Mail-1.2.0

IrootQlocalhost ~1# _
```

### 4. Extract files

Extract files from zip file on PBA-S node. We recommend saving custom PBA-S scripts in/usr/sbin/provider/ba/ – but it's up to you where you want to place BackupAgent PHP scripts and files. Do note that the document is written with that path in mind.

### 5. Define BackupAgent options

In the Provider Control Center, go to The Billing Director, Product Manager and select Custom Attributes, Define as many options as you need – the service name can be specified. It will show in PBA-S store in hosting plan options, so it should contain service parameters.

	Sp. z o.o.	Top > Billing Director > Product Manager > Custom Attributes	2 <u>Help</u> This screen ID: 01.01.03.03.36	Detimized Computing
	Account Director	Custom Attributes Categories		- (     Hide Actions
+ 4	Service Director Billing Director Receivable Receivable	New Attribute		
		Attributes Name Exclusive selection All	No 🔍 🔍 Search 🗊 Show All	- 🛞 <u>Hide Search</u>
	Report Manager     Accounting Manager	Attributes 1 - 7 of 7		× 🛚
1	🗉 🖗 Settings	ID 🛦 Name	Exclusive selection	Deleted
•	Commerce Director	1 Hard Disk	✓	<b>X</b>
	Configuration Director	2 Memory	✓	×
	Migration Director	<u>3</u> Processor	✓	<b>X</b>
q	Action Log	4 Additional Features	×	×
0	Support	5 Operating System	✓	×
	Sign Out	6 Backup Agent	✓	×
© Cop	yright 1999-2010, Parallels	<u>Z tacze</u>	✓	×
All righ	IS RESERVED	4		F.



Sp. z o.o. S	01.01.	Top > Billing Director > Produ           Backup Agent           Attribute         Options	tt Manager > Custom Attributes > Define options	<b>2</b> <u>Help</u> This screen ID: 01.01.03.03.78	Parallels" Optimized Computing
🗉 🤰 Account Director		General Setup		8	
E Service Director		Name	Backup Agent		
Billing Director		Catanami	Pade a Asast		
Receivable     Product Manager		Category	backup Agent		
Hosting Plans		Exclusive selection	✓		=
Custom Attribute	s	Force customer to select an attribute option	*		
🗉 꺯 Taxation Manager	-	Allow upgrade	✓		
🗄 🚯 Report Manager		Allow downgrade	✓		
🗄 🔏 Accounting Manager		Deleted	×		
E Commerce Director					
🗉 🐞 Marketing Director		Allowed Hosting Plan Types		⊗ ]	
🗉 🔆 Configuration Director		Dedicated Server	×		
Action Log		Miscellaneous	✓		
Support		Plesk Dedicated Node	✓		
😼 Sign Out		Plesk Domain	×		
		Plesk Virtual Node	×		
© Copyright 1999-2010, Parallels All rights reserved		Serwerv Wirtualne	×		

Sp. z This screen ID: 01.01.	Backu	ing Director > <u>Product</u> Jp Agent	t <u>Manager</u> > <u>Custom Attributes</u> >	<b>Help</b> This screen ID: 01.01.03.03.79	
	Attribute	Options			
🗟 🗄 🗄 Account Director	Actions				- 🛞 <u>Hide Actions</u>
E Service Director					
Billing Director					
Product Manager	New Option				
Hosting Plans	👚 Move Up 🛽	Move Down	Define as many opti	ions as you need	_
🗉 🤴 Discount Manager	Options 1 - 2 of	2			× 🛛
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K Configuration Director					
🗄 🏦 Migration Director					
Action Log					
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📵 Sign Out					
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All rights reserved	•				)

### 6. Setup event actions

Go to the Event Manager in the Configuration Director of PBA-S and create new actions for events:

 ID 12 – Subscription has been created php /usr/sbin/provider/ba/ba\_exec.php "action=createreseller&subscription\_id=@@subscription.id@"

- ID 10 Subscription has been updated php /usr/sbin/provider/ba/ba\_exec.php "action=createreseller&subscription\_id=@@subscription.id@"
- ID 60 Subscription has been deleted

php /usr/sbin/provider/ba/ba\_exec.php

"action=deletereseller&subscription\_id=@@subscription.id@"

First you have to find event:

Sp. z o.o. This screen ID: 01.01.	Events	<u>n Director</u> > <u>Event Manager</u> >	<u>He</u> This screen ID: 01.01.06.03.	Deptimized Computing
Image: Service Director	ID Events	Search for event ID ent type Object type All	💌 🔍 Search 📑 Show All	Hide Search
Set State     Set State	Events 1 - 1 of 1			× 🛛
<ul> <li>Configuration Director</li> <li>Security Manager</li> <li>License Manager</li> <li>License Manager</li> <li>Event Manager</li> <li>Event Log</li> <li>Actions</li> <li>Events</li> <li>Instant Messaging</li> <li>Miscellaneous Settings</li> <li>Miscellaneous Settings</li> <li>Migration Director</li> <li>Action Log</li> <li>Support</li> <li>Support</li> </ul>	12 Subscript Events I - 1 of 1	Click to edit actions	Subscription	<ul> <li>✓</li> <li>※ ≥</li> </ul>

Define a new action:

Sp. z o.o.	Top > Configuration Director > Event Manager > Events >       Image: Bubble Comparison Compa	
Image: Service Director         Image: Director         Image: Director         Image: Director         Image: Director         Image: Director<	Ceneral Settings Actions Event must be enabled to process actions Customer can control receiving notifications for this event Cancel Reset to Default Update	
	4	P

Sp. z o.o.	Subscription has been created           General Settings         Actions	This screen ID: 0	Help     I.01.06.03.13
<ul> <li>Account Director</li> <li>Service Director</li> <li>Billing Director</li> </ul>	Subscription No actions have been attached to this type	Add Action	
Commerce Director     Security Manager	Domain Subscription Subscription notification for customer	Add Action	Add action for hosting plan types in which you will offer BA sevice
License Manager     Levent Manager     Event Log     Actions	Dedicated Server Subscription           Subscription notification for customer           Virtuozzo Dedicated Node Subscription	Add Action	In our case BA service is offered only in Misc. hosting plans so we
<ul> <li>Events</li> <li>Instant Messaging</li> <li>Notification Settings</li> <li>Miscellaneous Settings</li> </ul>	Subscription notification for customer Miscellaneous Subscription Miscellaneous subscription notification for customer	Add Action 📀	for that plans.
Gordate Manager     G	Miscellaneous subscription notification for provider BackupAgent - Create Account		
Cis Support	Container Subscription Subscription Container notification for customer	Add Action 🔕	-





# 7. Setup hosting plans

You can add as many hosting plans as you need. You can also add BackupAgent service to existing ones.



### 8. Setup configuration

There are two config files:

- config/config.php holds credentials PBA-S connection, hosting plans configuration and SMTP
- Libraries/Config.php holds BackupAgent login credentials

The most important thing to do is to setup your BackupAgent options by

filling *\$cfg['hspc']['ba\_plan']* array in *config/config.php*. You add as many entries as BackupAgent options in PBA-S.

Sp. z o.o. This screen ID: 01.01.	Top > Billing Director > Product Manager > Custom Attributes > Backup Agent	This screen ID: 01.01.03.03.79
🖃 🏠 saatiisa ka	Attribute Options	config/config.php
<ul> <li>2</li> <li>3</li> <li>3</li> <li>4</li> <li>Count Director</li> <li>3</li> <li>3</li> <li>3</li> <li>5</li> <li>a</li> <li>a</li></ul>	-Actions Option ID in config should match one in PBA-S	Recent actions
Billing Director     Receivable     Product Manager	New Option	<pre>sc']('ba_plan'] = array ( irrams for custom attribute id = 16 &gt; array (</pre>
Hosting Plans	The Move Up S Move Down	<pre>id' =&gt; 16, 'name' =&gt; 'BA v1', 'user guota' =&gt; 1. // limit for user, does not work for reseller</pre>
	Doptions 1 - 2 of 2	<pre>maxScorageGB =&gt; 5, // limit for reseller does not work for user 'ba_user_bandwidth' &gt;&gt; 256, '// maxWormc?lis'</pre>
<ul> <li>Accounting Manager</li> <li>K Settings</li> </ul>	I6         BA 5 GB, max 3 konta           I7         BA 10 GB, max 10 kont         ),	<pre>max_users_pro' =&gt; 5, // maxProfessionalCALS</pre>
Commerce Director      Marketing Director      Gonfiguration Director	Options 1 - 2 of 2 17 =>	<pre>&gt; array ( id' =&gt; 17, 'mane' =&gt; 'Ba v2' </pre>
Action Log		<pre>user_quota' =&gt; 1, 'maxStorageGB' =&gt; 10,</pre>
යි. Support ම Sign Out	values should be setup in newly created or upgraded/downgraded	<pre>'ba_user_bandwidth' =&gt; 512, 'max_users' =&gt; 10, 'max_users_pro' =&gt; 15,</pre>
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- 8.1 config/config.php
  - **\$cfg['mail']['host']** is the SMTP server that it can connect to to send the mails with user credentials.
  - \$cfg['mail']['auth'] if set to true the mailer will use SMTP authentication. It will login with\$cfg['mail']['username'] and \$cfg['mail']['password'].
  - **\$cfg['mail']['sender\_name']** is the name that is shown the email originated from. For example BackupAgent Support.
  - **\$cfg['mail']['sender\_email']** is the email address the system shall send from.
  - **\$cfg['hspc']['protocol']** is the protocol it will connect to. It can be http:// or https://
  - **\$cfg['hspc']['host']** is the URL of the PBA-S HSPC.
  - **\$cfg['hspc']['email']** is the email address it can login with on PBA-S HSPC.
  - **\$cfg['hspc']['pass']** is the corresponding password.
  - **\$cfg['hspc']['api\_version']** is the version of the API.
  - \$cfg['hspc']['ba\_storage\_id'] is the storage ID. This can be found in the Management Console under Server > Server settings > Storage locations.

 \$cfg['hspc']['ba\_allowWhiteLabel'] is if the reseller account should be allowed to whitelabel. Do note that you need to have this option in your license. You can find this out in the management console under License > Max. # Private Label Groups. If you cannot create Private Label Groups, leave it false.

#### 8.2 libraries/Config.php

- **\$ba\_host** is the URL to the management console.
- **\$ba\_wsdl** is the URL to the BackupAgent WSDL.
- **\$ba\_username** is the username to login to the BackupAgent server.
- **\$ba\_password** is the password to login to the BackupAgent server.
- **\$ba\_prefix** is the prefix for the user accounts. When an account is made it will be in this format: **\$ba\_prefix-@@subscription.id@** (for example admin-1)

\*The WSDL for our Cloud Servers are respectively:

https://cloud01.backupagent.com/CloudBackupService/BackupService.asmx?wsdl

https://cloud02.backupagent.com/CloudBackupService/BackupService.asmx?wsdl

https://cloud03.backupagent.com/CloudBackupService/BackupService.asmx?wsdl

### 9. Ordering BackupAgent service

When ordering BackupAgent enabled hosting plans PBA-S will ask user to select BackupAgent service option:

Parallels Business Automation	Wybierz swój języka 💴 🔜											
Home   Zostań partnerem   Kontakt   O nas   » Loqui do panelu klienta												
New Order												
Kroki: (1) Pakiet (2) Dom	eny <b>3 Dodatki</b> (4) Zaloguj Się / Zarejestruj się (5) Konfiguracja	a (6) Kasa (7) Platność (8) Potwierdzenie										
😭 family formali	Backup Agent	Opłata instalacyjna Miesięczna opłata										
Pakiet: (Zmień)	BA 5 GB, max 3 konta	0,00PLN 20,00PLN										
Backup Agent 0,00PLN Dodatki: (Zmień)	BA 10 GB, max 10 kont	0,00PLN 40,00PLN										
Zasoby: (Zmień)	Back	Continue to Next Step										
Not Added												
Sumarycznie: 0,00PLN												
Kasa <u>Anului</u>												

When an order will be processed and new subscription created, PBA-S will process action and run the script. Script will setup new account in BackupAgent server system.

Script will send e-mail notification to provider and customer with user login and password for BackupAgent account.

Example e-mail:



### 10. Upgrading/downgrading BackupAgent service

#### 10.1 Upgrade/downgrade service

Customer can upgrade/downgrade his service directly from PBA-S control panel.

Parallels Business Automation	System Miscellaneous (4)	Moje konto Pan Centrum Ulepszeń	Pomoc 🖉					
Zarządzanie Ulepszeniami 🛞	Centrum Uleoszeń > Zmień Inne Opcje for subscription #56 Miscellaneous (4) ID tego ekranu: none							
Backup Agent           Image: Second Strength Strengt Strengt Strength Strength Strength Strength Strength Strengt S	Kolejne kroki: ① Pozostałe Opcje ② Złóż Zamówienie ③ Płatność ④ Potwierdzenie							
	Backup Agent							
	Nazwa	Opcje	Upgrade fee	Miesięczna opłata				
	Backup Agent	🔘 BA 5 GB, max 3 konta	Darmowe	20,00PLN				
	васкир Аденс	BA 10 GB, max 10 kont	Darmowe	40,00PLN				
	Cofnij			Następny				
© Copyright 1999-2010, Parallels All rights reserved	4							

When an order will be processed and new subscription created, PBA-S will process action and run the script. Script will setup new account in BA system.

Script will send e-mail notification to provider and customer to inform about change in subscription.

### 11. Additional notes

#### 11.1 PEAR setup

Script requires PEAR Mail extension to send notifications. You can use libraries/PEAR for this or use system's default.

#### 11.2 SOAP communication with PBA-S

You must create a PBA-S staff to access subscription data in PBA-S. User must have 'superadministrator' role for provider. Credentials for that user should be setup in config/config.php. To communicate with PBA-S we use a modified version of NuSOAP library taken from PBA-S store. We found that the PBA-S API does not work with other versions of NuSOAP or native PHP functions.

#### 11.3 Custom confirmation/upgrade/deletion mail

You can change the e-mails in *libraries/BAObject.php* by searching for *//Emails to send*. The emails are sent as html.

\$sbj is the subject of the email that will be sent.

\$msg is the email message

The template of the mail can be changed in *libraries/Mailer.php* by changing \$html

11.4 Management Console

Do note that for this to work Provisioning Integration should be enabled and Active Directory should be off.

#### 11.5 Billing

It is recommended to only create groups through PBA-S for your administration instead of also using the Administrator account for that.

### 12. Troubleshooting

#### 12.1 How to debug

You can call the ba\_exec.php directly from the console of the PBA-S container with: *php* /*usr/sbin/provider/ba/ba\_exec.php* "action=createreseller&subscription\_id=@@subscription.id@"whe re @@subscription.id@ is replaced by a valid subscription\_id by the PBA-S Provider Control Center. If everything goes well no error will be shown. To check if the store is doing a call to the container you can use the following command: *grepemail@address.com /var/log/hspc/xml\_api.log* replacing email@address.com with the email address used in the store front-end.

To check if the BackupAgent script is doing a correct callback you can use the following command: *grep get\_subscr\_info /var/log/hspc/xml\_api.log* 

This should return at least a value. If it does, it called the HSPC API.

12.2 Failed to create BA reseller

The user is not allowed to create resellers. This can be due to the fact that no whitelabel groups can be created or if the user doesn't have the right.

If the user has the proper rights, please check

if **\$cfg['hspc']['ba\_allowWhiteLabel']** in *config\config.php* is set to false.

12.3 I receive no registration/confirmation/error mail

Please check if the SMTP server is accessible with the credentials.