

# Acronis



## Acronis Data Cloud APS 2.0

**DEPLOYMENT GUIDE**

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# 1 About this guide

This document describes how to deploy the Acronis Data Cloud application in your Odin Service Automation infrastructure.

Acronis Data Cloud is a proven, comprehensive, local and cloud backup and recovery service for service providers. Acronis Data Cloud backs up data from any source, stores data locally, in the cloud, and lets you recover to any destination and system.

The application is provided as an Application Packaging Standard (APS) package.

## 2 Audience

This document is intended for service providers who want to provide the Acronis Data Cloud service to their customers.

## 3 Terms and abbreviations

This document uses the following terms and abbreviations:

- **Application Packaging Standard (APS)**  
An open standard that is intended to help service providers to provide software as a service (SaaS) applications to customers.
- **CloudBlue (former Odin Service Automation - OSA, former Parallels Automation)**  
A software platform that includes Operations Automation and Business Orchestration.

## 4 General architecture and services

The application enables the service provider to provide the backup service to customers, who then provide it to their users.

The service provider charges each customer based on one or more counters, such as the amount of backup storage. It does not matter how customers themselves charge their users.

The service hierarchy is the following:

- **Acronis Data Cloud**  
Data protection service
- **Backup Tenant**  
Group in Acronis Data Cloud, created per subscription with backup service.
  - **Cloud Storage**  
The total amount of backup storage that is available to all of the customer's users.
  - **Local Storage**  
The total amount of local backup storage that is available to all of the customer's users.
  - **Service Provider's Cloud Storage**  
The total amount of service provider's storage consumed by the reseller's customers.

- **Reseller's Cloud Storage**  
The total amount of reseller's own storage consumed by his customers.
- **Google Hosted Storage**  
The total amount of Google cloud backup storage that is available to all of the customer's users.
- **Microsoft Azure Hosted Storage**  
The total amount of Microsoft Azure cloud backup storage that is available to all of the customer's users.
- **Servers**  
The total number of servers that all of the customer's users can back up. A server is a machine running a Windows Server or Linux operating system.
- **Workstations**  
The total number of workstations that all of the customer's users can back up. A workstation is a machine running a Windows operating system other than Windows Server.
- **Virtual Machines**  
The total number of ESX(i) and Hyper-V virtual machines that all of the customer's users can back up. A virtual machine is counted regardless of the type of its operating system (if any).
- **Mobile Devices**  
The total number iOS and Android mobile devices that all of the customer's users can back up.
- **Office 365 Seats**  
The total number of Microsoft Office 365 seats that customer's administrators can back up.
- **Office 365 Mailboxes**  
Gives customer's users the ability to protect Office 365 mailboxes.
- **Office 365 OneDrive**  
Gives customer's users the ability to protect Office 365 OneDrive.
- **Office 365 SharePoint Sites**  
Gives customer's users the ability to protect Office 365 SharePoint.
- **Web Hosting Servers**  
The total number of web hosting servers that all of the customer's users can back up.
- **Websites**  
The total number of websites that all of the customer's users can back up.
- **Disaster Recovery Storage**  
The total amount of disaster recovery storage that is available to all of the customer's users. This storage is used by primary and recovery servers.
- **Compute Points**  
The total amount of compute points that is available to all of the customer's users. Compute point is an aggregate value for CPU and RAM resources that are consumed by primary and recovery servers.
- **Cloud Servers**  
The total number of primary and recovery servers that all of the customer's users can back up. Primary and recovery servers are cloud virtual machines.
- **Internet Access**  
Gives customer's users the ability to enable the Internet access from primary and recovery servers.

- **Public IP Addresses**  
The total number of public IP addresses that can be assigned to primary and recovery servers, available to all of the customer's users.
- **Backup Users**  
The number of the customer's users who can use the backup service.
- **Backup Profile**  
The backup service settings. In the backup profile, the service provider can define what storage should be assigned to a customer on the backup service provisioning.
- **Reseller Branding**  
Gives resellers access to Management Console and ability to configure branding and register own cloud storage.

## 5 APS package requirements

### *For CloudBlue 8.0*

- APS Endpoint:
  - CentOS 7.x or RHEL 7.x
  - PHP runtime 8.0-121 or higher
  - redis 3.2 or higher
  - httpd 2.4 or higher with submodule mod\_ssl
  - python 2.7
  - PHP 5.6 or higher
    - php-pdo
    - php-xml
    - php-xmlrpc
    - php-soap
    - php-mbstring
    - php-posix
    - php-pdo\_sqlite
  - APS package version 1994, 1997 or 2007 (for upgrade only)
- Acronis Data Cloud 7.8 Update 2 or higher

### *For Odin Automation 7.4*

- APS Endpoint:
  - CentOS 7.x or RHEL 7.x
  - PHP runtime 7.4-113 or higher
  - redis 3.2 or higher
  - httpd 2.4 or higher with submodule mod\_ssl
  - python 2.7
  - PHP 5.6 or higher
    - php-pdo
    - php-xml
    - php-xmlrpc

- php-soap
- php-mbstring
- php-posix
- php-pdo\_sqlite
- APS package version 1994, 1997 or 2007 (for upgrade only)
- Acronis Data Cloud 7.8 Update 2 or higher

#### **Other cases**

- If you have APS version lower than 1994 installed or Odin Automation version lower than 7.4, refer to knowledge article <https://kb.acronis.com/content/62463>.

## 6 Deployment procedure

To make the backup service available to your customers, the following steps should be performed:

1. Allow the endpoint to connect Operations Automation Public API service.
2. Configuring the endpoint. This step prepares the infrastructure to work with the backup service application.
3. Installing the package. During this step the following actions are fulfilled automatically:
  - a. Importing the package. This step makes the APS package of the backup service available in Operations Automation.
  - b. Creating an application instance. This step makes the backup service appear as an Operations Automation application.
  - c. Creating resource types. This step defines a list of resources that will be provided by the service, such as storage space.
  - d. Creating a service template. This step binds the list of resources that was created in the previous step to the backup service. This step also sets up the look of the backup service interface.
4. Configuring an APS instance.
5. Creating a service plan. This step sets up the amounts and prices that are associated with the service.

### 6.1 Allowing endpoint to connect OSA API

To work with the application programming interface (API) of the backup service, the APS package uses a machine called an endpoint, also known as a provisioning host. Before deploying the APS package, you must allow the endpoint to connect OSA API.

- a. Log on to the provider control panel.
- b. Navigate to **System > Settings > Public API > Allowed Networks**.
- c. Add the endpoint host to the list.

### 6.2 Configuring the endpoint

The endpoint must be a machine running an RPM-based Linux distribution (such as CentOS) that has the Apache web server and PHP installed in accordance with the Requirements (p. 5).

1. Configure PHP:

For example:

```
rpm -Uvh https://mirror.webtatic.com/yum/el7/epel-release.rpm
rpm -Uvh https://mirror.webtatic.com/yum/el7/webtatic-release.rpm
yum install php56w php56w-mbstring php56w-pdo php56w-posix php56w-soap
php56w-xml php56w-xmlrpc mod_ssl redis
```

2. Configure APS PHP runtime:

The latest version of the APS PHP runtime can be downloaded from <https://docs.cloudblue.com/oa/8.0/sdk/resources/downloads/>.

For example:

```
rpm -Uvh
http://download.apsstandard.org/php.runtime/aps-php-
runtime-8.0-121.el7.noarch.rpm
```

**To create daily cron job at endpoint to archive all files older than 1 day (optionally)**

Execute the following command at APS endpoint:

```
cat /etc/cron.daily/backupservice_log_archiving <<FILE
#!/bin/sh

/bin/find /var/www/html/backupservice/log -type f -not -name "*.gz" -not -name '.*'
-mtime +1 | /bin/xargs -r /bin/gzip -f
FILE
```

---

*The following procedures involve restarting the endpoint's web server. Internet connection may be required for downloading additional Linux packages.*

---

## 6.3 Installing the package

1. Log on to the endpoint as the root user.
2. Place the .zip file of the APS package to the machine.
3. Extract files from .zip archive:

```
unzip <APS package name> rpms/*
```

For example:

```
unzip AcronisBackupCloud-2.0-XXX.app.zip rpms/*
```

4. Specify host should be used to connect to Operations Automation Public API:

```
export POA_HOST=<Domain name or IP>
```

For example:

```
export POA_HOST=acronis.apsdemo.org
```

5. Change current directory

```
cd rpms
```

6. Install the .rpm file shipped with the package:

```
rpm -Uvh <RPM NAME>
```

For example:

```
rpm -Uvh acronis-backup-cloud-2.0-XXX.x86_64.rpm
```

If the installation fails because of failed dependences, install required packages using **yum install** command.

Once the .rpm package is installed, the following elements become available in the provider control panel:

- Acronis Data Cloud APS package instance in the **Services > Applications > APS Instances**.
- Acronis Data Cloud resources appear in the **Products > Resources list**.
- Two default resource templates are created in **Products > Service Templates**.

## 6.4 Configuring APS instance

1. Log on to the provider control panel.
2. Navigate to **Services > Applications > APS Instances**.
3. Find Acronis Data Cloud instance.
4. Configure connection to Acronis Data Cloud service:
  - a. Specify the Management console URL, which matches the account management console address (<https://cloud.acronis.com/>).
  - b. Specify your Acronis Data Cloud administrator user name and password.  
The account you specify must have permissions to create End-User Company groups in Acronis Data Cloud.
  - c. Click **Save**.

Once the package is configured, proceed with the service plan configuration described in the Creating a service plan section.

## 6.5 Creating a service plan

Service templates for a customer and a reseller are created automatically during the package installation. If you need a custom service template or a service template for an external service provider, please create them manually.

### *To create a service plan*

1. In Operations Automation, click **Billing** to open Business Orchestration.
2. In Business Orchestration Control Panel, go to **Products > Service Plans**.
3. Click **Add New Service Plan**.
4. Click **Generic Service Plan**, and then click **Next**.
5. Under **General**, do the following:
6. In **Name**, type the name of the service plan.
7. In **Service Template**, type the ID of the service template.
8. In Description, specify a short plan description that will be shown to your users.
9. In Extended Description, specify a detailed plan description that will be shown to your users.
10. Under **Billing Terms and Advanced Properties**, specify the desired properties of the plan.
11. Click **Next**.
12. Specify the subscription periods that you want to offer, and the prices and fees for those periods.
13. Click **Next**.
14. To specify one or more resource rates (also called plan rates), such as the included and maximum amounts of storage that is available under the plan, click Setup Plan Rates. For details, see the examples later in this section. The table below shows which resources are countable or not.



Resources	Countable
Servers	YES
Virtual Machines	YES
Workstations	YES
Mobile Devices	YES
Office 365 Seats	YES
Websites	YES
Office 365 Mailboxes	NO
Office 365 OneDrive	NO
Office 365 SharePoint Sites	NO
Web Hosting Servers	YES
Disaster Recovery Storage	YES
Compute Points	YES
Cloud Servers	YES
Internet Access	NO
Public IP Addresses	YES
Local Storage	YES
Cloud Storage	YES
Google Hosted Storage	YES
Microsoft Azure Hosted Storage	YES
Provider's Hosted Storage	YES
Reseller's Hosted Storage	YES

15. Review the settings, and then click **Finish**.

## Service Plan examples

Each resource rate contains the included units, maximum units, and the fees for setup and overuse.

### *Consider the following example*

**Example 1.** Suppose that you want to offer annual desktops backup subscription.

In this case, set up the subscription periods as follows:

Duration	Unit	Trial	Setup Fee	Renewal Fee	Currency	Active
30	Day(s)	Yes	\$0.00	\$0.00	USD	Yes
1	Year(s)	No	\$299.00	\$299.00	USD	Yes

The resource rates configuration:

Name	Inc. Amount	Max Amount	Setup Fee	Recurring Fee (Annually)
Cloud Storage – 1000 GB	0.00	Unlimited	\$0	\$2,400.00
Cloud Storage – 250 GB	0.00	Unlimited	\$0	\$750.00

Cloud Storage – 5000 GB	0.00	Unlimited	\$0	\$8,500.00
Cloud Storage – 500 GB	0.00	Unlimited	\$0	\$1,300.00
Local Storage – 500 GB	0.00	Unlimited	\$0	\$500.00
Workstation 5x	0.00	Unlimited	\$0	\$180.00
Cloud Storage (GB)	250.00	250.00	\$0	\$0.00
Local Storage (GB)	250.00	250.00	\$0	\$0.00
Workstations	3.00	3.00	\$0	\$0.00

**Example 2.** Suppose that you offer annual servers backup subscription:

In this case, set up the subscription periods as follows:

Duration	Unit	Trial	Setup Fee	Renewal Fee	Currency	Active
30	Day(s)	Yes	\$0.00	\$0.00	USD	Yes
1	Year(s)	No	\$899.00	\$899.00	USD	Yes

The resource rates configuration:

Name	Inc. Amount	Max Amount	Setup Fee	Recurring Fee (Annually)
Cloud Storage – 1000 GB	0.00	Unlimited	\$0	\$2,400.00
Cloud Storage – 250 GB	0.00	Unlimited	\$0	\$750.00
Cloud Storage – 5000 GB	0.00	Unlimited	\$0	\$8,500.00
Cloud Storage – 500 GB	0.00	Unlimited	\$0	\$1,300.00
Local Storage – 500 GB	0.00	Unlimited	\$0	\$500.00
Workstation 5x	0.00	Unlimited	\$0	\$180.00
Cloud Storage (GB)	500.00	250.00	\$0	\$0.00
Local Storage (GB)	250.00	500.00	\$0	\$0.00
Workstations	0.00	0	\$0	\$0.00
Servers	1.00	Unlimited	\$0	\$499.00
Virtual Machines	3.00	Unlimited	\$0	\$110.00

## 7 Upgrade procedure

To make the newer backup service available to your customers, do the following:

- Upgrade `aps-php-runtime`
  - For OSA 7.4: to 7.4-113 or higher from <https://docs.cloudblue.com/oa/7.4/sdk/resources/downloads/>.
  - For OSA 8.0: to 8.0-121 or higher from <https://docs.cloudblue.com/oa/8.0/sdk/resources/downloads/>.
- Upgrade APS package to **acronis-backup-cloud-2.2-2052.x86\_64.rpm**: download it here <http://dl2.acronis.com/u/ci/aps-abc/2.0/2052/AcronisBackupCloud-2.2-2052.premium.app.zip> or [http://dl2.acronis.com/u/ci/aps-abc/2.0/2052/acronis-backup-cloud-2.2-2052.premium.x86\\_64.rpm](http://dl2.acronis.com/u/ci/aps-abc/2.0/2052/acronis-backup-cloud-2.2-2052.premium.x86_64.rpm):

3. Log on to the endpoint as the root user.
4. Place the .zip file of the APS package to the machine.
5. Extract files from .zip archive:  
`unzip <APS package name> rpms/*`  
 For example:  
`unzip AcronisBackupCloud-2.0-XXX.app.zip rpms/*`
6. Specify host should be used to connect to Operations Automation Public API:  
`export POA_HOST=<Domain name or IP>`  
 For example:  
`export POA_HOST=acronis.apsdemo.org`
7. Change current directory  
`cd rpms`
8. Install the .rpm file shipped with the package:  
`rpm -Uvh <RPM NAME>`  
 For example:  
`rpm -Uvh acronis-backup-cloud-2.0-XXX.x86_64.rpm`

If the installation fails because of failed dependences, install required packages using **yum install** command.

Once the .rpm package is installed, the following elements become available in the provider control panel:

- Acronis Data Cloud APS package instance in the **Services > Applications > APS Instances**.
- Acronis Data Cloud resources appear in the **Products > Resources list**.
- Two default resource templates are created in **Products > Service Templates**.

## 8 Post-upgrade actions

Configure service templates for customers, resellers and service providers. Make sure that all service templates include the following set of resources.

### *Set of resources for customers*

Resource name	Limit
Acronis Data Cloud	1
Backup Tenant (Acronis)	1
Servers (Acronis)	Unlimited
Virtual Machines (Acronis)	Unlimited
Workstations (Acronis)	Unlimited
Mobile Devices (Acronis)	Unlimited
Office 365 Seats (Acronis)	Unlimited
Office 365 mailboxes (Acronis)	Unlimited
Office 365 OneDrive (Acronis)	Unlimited
Office 365 SharePoint Sites (Acronis)	Unlimited

Web Hosting Servers (Acronis)	Unlimited
Disaster Recovery Storage (Acronis)	Unlimited
Compute Points (Acronis)	Unlimited
Cloud Servers (Acronis)	Unlimited
Internet Access (Acronis)	Unlimited
Websites (Acronis)	Unlimited
Public IP Addresses (Acronis)	Unlimited
Backup Profile (Acronis)*	1
Backup Users (Acronis)	Unlimited
Cloud Storage (Acronis)	Unlimited
Local Storage (Acronis)	Unlimited

\*This should be a profile with account\_type option set to 'Customer'.

### ***Set of resources for resellers***

<b>Resource name</b>	<b>Limit</b>
Acronis Data Cloud	1
Backup Tenant (Acronis)	1
Servers (Acronis)	Unlimited
Virtual Machines (Acronis)	Unlimited
Workstations (Acronis)	Unlimited
Mobile Devices (Acronis)	Unlimited
Office 365 Seats (Acronis)	Unlimited
Office 365 mailboxes (Acronis)	Unlimited
Office 365 OneDrive (Acronis)	Unlimited
Office 365 SharePoint Sites (Acronis)	Unlimited
Web Hosting Servers (Acronis)	Unlimited
Disaster Recovery Storage (Acronis)	Unlimited
Compute Points (Acronis)	Unlimited
Cloud Servers (Acronis)	Unlimited
Internet Access (Acronis)	Unlimited
Websites (Acronis)	Unlimited
Public IP Addresses (Acronis)	Unlimited
Cloud Storage (Acronis)	Unlimited
Local Storage (Acronis)	Unlimited
Reseller Branding (Acronis)	1
Google Hosted Storage (Acronis)	Unlimited
Microsoft Azure Hosted Storage (Acronis)	Unlimited

Provider's Hosted Storage (Acronis)	Unlimited
Reseller's Hosted Storage (Acronis)	Unlimited

### ***Set of resources for external service providers***

<b>Resource name</b>	<b>Limit</b>
Acronis Data Cloud	1
Backup Tenant (Acronis)	1
Servers (Acronis)	Unlimited
Virtual Machines (Acronis)	Unlimited
Workstations (Acronis)	Unlimited
Mobile Devices (Acronis)	Unlimited
Office 365 Seats (Acronis)	Unlimited
Office 365 mailboxes (Acronis)	Unlimited
Office 365 OneDrive (Acronis)	Unlimited
Office 365 SharePoint Sites (Acronis)	Unlimited
Web Hosting Servers (Acronis)	Unlimited
Disaster Recovery Storage (Acronis)	Unlimited
Compute Points (Acronis)	Unlimited
Cloud Servers (Acronis)	Unlimited
Internet Access (Acronis)	Unlimited
Websites (Acronis)	Unlimited
Public IP Addresses (Acronis)	Unlimited
Backup Profile (Acronis)*	1
Backup Users (Acronis)	Unlimited
Cloud Storage (Acronis)	Unlimited
Local Storage (Acronis)	Unlimited
Google Hosted Storage (Acronis)	Unlimited
Microsoft Azure Hosted Storage (Acronis)	Unlimited
Provider's Hosted Storage (Acronis)	Unlimited
Reseller's Hosted Storage (Acronis)	Unlimited

\*This should be a profile with account\_type option set to 'Partner'.

## **9 Configure resources in billing**

### ***To configure unit of measure for “Cloud Storage (Acronis)” resource***

1. In Operations Automation, click **Billing** to open Business Orchestration.
2. In Business Orchestration Control Panel, go to **Products > Resources**.
3. Open **“Cloud Storage (Acronis)”** resource.

4. Click **Change Unit of Measure**.
5. Change **Unit of Measure** for the resource from **KB** to **GB**.
6. Set **ShowInCP flag = ON**.
7. Click **Save**.

Repeat these steps for **Local Storage (Acronis)**, **Reseller's Hosted Storage (Acronis)**, **Provider's Hosted Storage (Acronis)**, **Microsoft Azure Hosted Storage (Acronis)**, and **Google Hosted Storage (Acronis)** resources.

***To create composite resources (example)***

1. In Operations Automation, click Billing to open Business Orchestration.
2. In Business Orchestration Control Panel, go to Products > Resources.
3. Create three composite resources:
  - a. "Workstation 5x" resource includes:
    - 5 units of "Protected Workstations (Acronis)" resource
  - b. "Cloud Storage - 250 GB" resource includes:
    - 250 GB of "Cloud Storage (Acronis)" resource
  - c. "Cloud Storage - 500 GB" resource includes:
    - 500 GB of "Cloud Storage (Acronis)" resource
  - d. "Cloud Storage - 1000 GB" resource includes:
    - 1000 GB of "Cloud Storage (Acronis)" resource
  - e. "Cloud Storage - 5000 GB" resource includes:
    - 5000 GB of "Cloud Storage (Acronis)" resource