ADB Cloud Bundle

ADB Cloud Bundle is a hostprovider to automatically deploy Arenadata DB (ADB) clusters in various clouds.

Version CURRENT Language: EN

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Planning guide

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Requirements

To use the ADB Cloud Bundle, ensure the following conditions are met:

- The following bundles must be loaded in the ADCM:
  - ADB Cloud Bundle;
  - product bundle — Arenadata DB (ADB);
  - cloud hostprovider bundle — for example, Yandex Cloud hostprovider;
  - bundle for a monitoring cluster — Monitoring Bundle (if you plan to install a monitoring cluster for ADB);
  - bundle to deploy a monitoring cluster in a cloud — Monitoring Cloud Bundle (if you plan to install a monitoring cluster for ADB).
- The hostprovider of the cloud where the ADB cluster will be deployed must be created and configured in advance.

Limitations

The ADB Cloud Bundle allows you to create an ADB cluster, but there are some limitations:

- If you need to change the number of hosts in a cluster, you need to manually adjust this number in the DB Cloud Bundle configuration setting (*Community/Enterprise Config*, *Monitoring Config*, *Cloud.ru Advanced/CROC Cloud/Yandex Cloud Config*).
- For ADB cluster installation, some ADB service parameters (in the `services_config` section of the *Community/Enterprise Config* cluster configuration) are required. If such a parameter is a password (for example, `default_user_password`), it is stored unencrypted.

Installation and configuration

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This article describes the steps to create and configure the ADB Cloud Bundle hostprovider in ADCM.

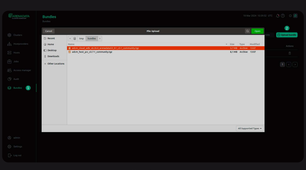
Step 1. Get a bundle

Please get a bundle for the ADB Cloud Bundle hostprovider from the Arenadata support team.

Step 2. Upload a hostprovider bundle to ADCM

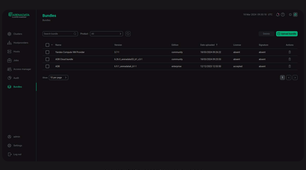
To upload a bundle to ADCM, follow the steps:

1. Select the *Bundles* item in the left navigation menu and click *Upload bundle*.
2. Select a bundle in the *Open File Dialog*.



Upload a bundle

3. As a result of the performed actions, a bundle is displayed on the *Bundles* page.

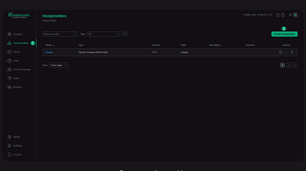


The result of successful bundle upload

Step 3. Create a hostprovider based on the uploaded bundle

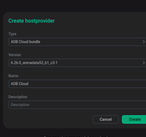
To add a new hostprovider to ADCM on the base of the uploaded bundle, follow the steps:

1. Select the *Hostproviders* item in the left navigation menu and click *Create provider*.



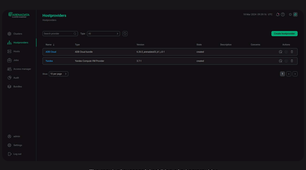
Create a new hostprovider

2. In the window that opens:
   - Select an uploaded bundle in the *Type* field.
   - Select a bundle version in the *Version* field. Several versions become available in the case of different versions of the same bundle being uploaded.
   - Enter a hostprovider name in the *Name* field.
   - Enter a hostprovider description in the *Description* field if necessary.
   - Click *Create*.



Create hostprovider window

3. As a result of the performed actions, the created hostprovider is displayed on the *Hostproviders* page.



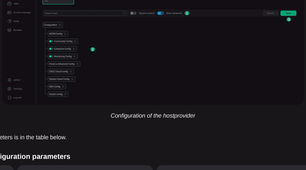
The result of successful addition of a hostprovider

Step 4. Configure a hostprovider

NOTE

All configuration parameters of the ADB Cloud Bundle hostprovider are set automatically when you create it in ADCM. Change the settings only if custom installation is required.

1. On the *Hostproviders* page, click the hostprovider name in the *Name* column.
2. In the opened window:
   - Open the *Primary Configuration* tab.
   - Activate the *Show advanced* switch.
   - Fill in configuration parameters of the hostprovider.
   - Click *Save*.



Configuration of the hostprovider

The assignment of parameters is in the table below.

ADB Cloud Bundle configuration parameters

Group	Parameters	Description
ADCM Config	Adcm user	Login used for user authentication in ADCM
	Adcm password	Password used for user authentication in ADCM
Community Config	Cluster configuration	Configuration that defines the distribution of ADB service components between cluster hosts, as well as the configuration of services and the cluster itself in JSON format. This configuration is applied when you use the Community edition of an ADB bundle to install a cluster (if you disable the *Enterprise* edition option in the init product cluster action settings before creating the cluster)
Enterprise Config	Cluster Enterprise configuration	Configuration that defines the distribution of ADB service components between cluster hosts, as well as the configuration of services and the cluster itself in JSON format. This configuration is applied when you use the Enterprise edition of an ADB bundle to install a cluster (if you activate the *Enterprise* edition option in the init product cluster action settings before creating the cluster)
Monitoring Config	Cluster Monitoring configuration	Configuration that defines the distribution of monitoring service components between cluster hosts. This configuration is applied if you activate the *Enable monitoring* option in the init product cluster action settings
Cloud.ru Advanced Config CROC Cloud Config Yandex Cloud Config	S size nodes config M size nodes config X size nodes config	Configurations of hosts that will be created in the selected cloud. You can change the number of hosts and their parameters in accordance with a cloud hostprovider bundle. ADB Cloud Bundle supports a separate host configuration for each cluster size (`S`, `M`, `X`). These configurations are applied if you select the corresponding cloud in the init product cluster action settings and the cloud hostprovider is configured. Virtual machines with the specified parameters will be automatically created in the selected cloud to be used as ADB cluster hosts
SSH Config	Username Password SSH private key S size nodes config M size nodes config X size nodes config	Parameters for connecting to pre-created and configured hosts. For cluster installation on hosts, SSH connection parameters (`username`, `Password`, `SSH private key`, and IP addresses of hosts) specified manually by a user will be used
Scripts config	Init script	Initialization script that will be passed to the `init_script` field of the cloud hostprovider and will be executed on a host by `cloud_init`. Inherits all restrictions of the cloud hostprovider, if any
	Post script	Script that will be executed by Ansible on all hosts after the ADB cluster installation. The default value is `bash /usr/adcm/preconf_adb_script.sh`

IMPORTANT

A set of services and components, as well as their configurations, may differ in different versions of the ADB product. When editing a configuration, monitor the number of hosts over which service components are distributed and change this number in the *Community Config*/*Enterprise Config*, *Monitoring Config*, and *Cloud.ru Advanced Config*/*CROC Cloud Config*/*Yandex Cloud Config* settings.

Create a cluster with ADB Cloud Bundle

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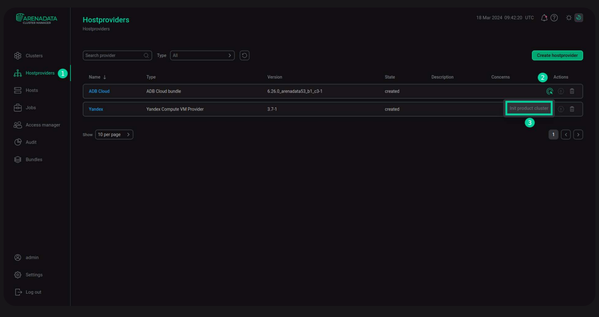
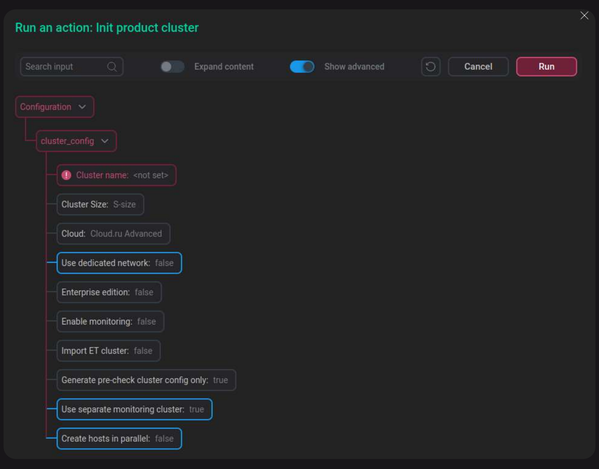
To deploy an ADB cluster in a cloud using ADB Cloud Bundle:

1. On the ***Hostproviders*** page, click the icon in the ***Actions*** column for the ADB Cloud Bundle hostprovider and select the ***Init product cluster*** action.



Switch to cluster creation

2. In the window that opens, activate the ***Show advanced*** switch and fill in the cluster configuration parameters (fields highlighted in red are required).



Configure the cluster to be created

Configuration parameters for cluster creation

Parameter	Description	Default value
Cluster name	ADB cluster name. It will also be used as a prefix in names of the cluster hosts	—
Cluster Size	ADB cluster size (`S size`, `M size`, or `X size`). Depending on the ADB Cloud Bundle configuration, it may affect the number and parameters of hosts on which the ADB cluster will be installed	S size
Cloud	Cloud where the ADB cluster will be deployed. For ADB Cloud Bundle version 6.26.0.53.b1.c3 Cloud.ru Advanced, Yandex, CROC, and SSH clouds are supported. The hostprovider of the selected cloud should be created and configured	Cloud.ru Advanced
Use dedicated network	Indicates whether the cluster initialization is executed with the use of dedicated network. The prerequisite for using this option is the availability of a second subnet in the hostprovider settings. After setting this flag, request traffic will go through a separate network (`MTU = 8888`) instead of the cluster management and monitoring network	false
Enterprise edition	Indicates whether the Enterprise version of the ADB bundle should be used for the cluster creation. The required version of the bundle should be uploaded to ADCM	false
Enable monitoring	Indicates whether a monitoring cluster should be installed and imported into the ADB cluster. If this option is applied, the distribution of monitoring services across hosts should be specified via the ***Monitoring Config*** setting in the ADB Cloud Bundle configuration. The Monitoring Bundle and Monitoring Cloud Bundle should be uploaded to ADCM	false
Import ET cluster	Indicates whether services of an Enterprise Tools (ET) cluster should be imported into the ADB cluster. An installed Enterprise Tools cluster with uploaded offline_pack is required	false
Generate pre-check cluster config only	Indicates whether information about the cluster to be installed should be generated and displayed in the ***Jobs*** section to allow pre-checking configuration only. To install the cluster, this flag must be unset	true
Use separate monitoring cluster	Indicates whether a separate monitoring cluster should be created for ADB. If this option is disabled and there is already another product cluster with the configured monitoring cluster in ADCM, that existing monitoring cluster will be reused for a new ADB cluster to be installed	true
Create hosts in parallel	Indicates whether the hosts inizialization in the cluster is executed simultaneously. ADCM must be configured with an external database (for example, PostgreSQL)	false

3. After you have specified the configuration parameters, click ***Run***.

You can find the operation execution log in the ***Jobs*** section.

After the cluster creation has finished successfully, the created virtual machines are added to the ***Hosts*** section and the product clusters appear in the ***Clusters*** section.

Release notes

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6.26.0

6.26.0.53.b1.c3

Date: 02.02.2024

New features

- Implemented the ability to use a dedicated network for the cluster

6.26.0.53.b1.c1

Date: 10.01.2024

New features

- Added support for ADB v6.26.0.53.b1
- Added support for ADCM 2.0.0
- Increased the timeout for host deployment to 1200 seconds

6.25.2

6.25.2.52.b1.c1

Date: 25.12.2023

New features

- Added support for ADB v6.25.2.52.b1
- Added support for ADB to ADB Connector
- Added support for parallel host creation

6.25.1

6.25.1.51.b1.c2

Date: 31.10.2023

New features

- Implemented the ability to import an Enterprise Tools (ET) cluster

6.25.1.51.b1.c1

Date: 11.10.2023

New features

- Added support for ADB v6.25.1.51.b1

6.25.1.49.b1.c1

Date: 31.08.2023

New features

- Added support for ADB v6.25.1.49.b1

6.23.5

6.23.5.45.b1.c1

Date: 21.06.2023

New features

Implemented a set of options to configure an ADB cluster (with monitoring if needed) to be installed:

- select cluster size;
- select a cloud where the cluster will be deployed;
- select a product bundle version — Enterprise or Community;
- install a monitoring cluster with the ability to select hosts for monitoring services;
- get complete information about the cluster configuration before installing it in a convenient format;
- create an additional monitoring cluster if another product with monitoring is already deployed in ADCM;
- manage `hc_map`, `services_config`, and `cluster_config`;
- execute init and post scripts.