

# Amazon DCV Session Manager



# Amazon DCV Session Manager: CLI Guide

# Table of Contents

<b>What is Session Manager CLI? .....</b>	<b>1</b>
<b>Installing the Session Manager CLI .....</b>	<b>2</b>
Prerequisites for installing Amazon DCV Session Manager CLI .....	2
Installing Amazon DCV Session Manager CLI .....	2
<b>Configuring the Session Manager CLI .....</b>	<b>4</b>
Configuration basics .....	4
Configuring the CLI settings .....	4
Command line options .....	5
Environment variables .....	6
Configuration file .....	8
<b>Working with the CLI .....</b>	<b>10</b>
Getting help with commands .....	10
Parameter types .....	12
Using the command structure .....	13
Syntax reference .....	13
Using return codes .....	14
<b>CLI command reference .....</b>	<b>16</b>
close-servers .....	16
Synopsis .....	17
Options .....	17
Example .....	17
create-session .....	17
Synopsis .....	17
Options .....	17
Example .....	17
delete-session .....	20
Synopsis .....	17
Options .....	17
Example .....	17
describe-servers .....	22
Synopsis .....	17
Options .....	17
Example .....	17
describe-sessions .....	23

Synopsis .....	17
Options .....	17
Example .....	17
get-session-connection-data .....	24
Synopsis .....	17
Options .....	17
Example .....	17
get-session-screenshots .....	25
Synopsis .....	17
Options .....	17
Example .....	17
open-servers .....	26
Synopsis .....	17
Options .....	17
Example .....	17
update-session-permissions .....	27
Synopsis .....	17
Options .....	17
Example .....	17
<b>Release Notes and Document History .....</b>	<b>29</b>
Release Notes .....	29
2024.0-457— October 1, 2024 .....	30
2023.1-17652— August 1, 2024 .....	30
2023.1-16388— June 26, 2024 .....	30
2023.1— November 9, 2023 .....	30
2023.0-15065— May 4, 2023 .....	31
2023.0-14852— March 28, 2023 .....	31
2022.2-13907— November 11, 2022 .....	31
2022.1-13067— June 29, 2022 .....	32
2022.0-11952— February 23, 2022 .....	32
2021.3-11591— December 20, 2021 .....	32
2021.2-11445— November 18, 2021 .....	32
2021.2-11190— October 11, 2021 .....	33
2021.2-11042— September 01, 2021 .....	33
2021.1-10557— May 31, 2021 .....	33
2021.0-10242— April 12, 2021 .....	34

---

2020.2-9662— December 04, 2020 .....	35
.....	35
Document history .....	35

# What is Amazon DCV Session Manager command line interface?

## Note

Amazon DCV was previously known as NICE DCV.

Amazon DCV Session Manager is set of installable software packages (an Agent and a Broker) and an application programming interface (API) that makes it easy for developers and independent software vendors (ISVs) to build front-end applications that programmatically create and manage the lifecycle of Amazon DCV sessions across a fleet of Amazon DCV servers.

You can use Amazon DCV Session Manager Command Line Interface (CLI) to interact with a DCV Session Manager broker using commands in your command-line shell.

- Linux shells — Use common shell programs such as bash, zsh, and tcsh to run commands in Linux or macOS.
- Windows command line — Run commands at the Windows command prompt or PowerShell.

You can use Amazon DCV Session Manager CLI to create and manage the lifecycle of Amazon DCV sessions. These are managed by a Amazon DCV Session Manager.

# Installing Amazon DCV Session Manager Command Line Interface

The Amazon DCV Session Manager Command Line Interface (CLI) is a powerful tool for managing remote desktop sessions on the Amazon DCV platform. To get started, you'll need to install the CLI on your local system. This section describes how to install the Session Manager CLI on Linux, macOS, and Windows.

## Topics

- [Prerequisites for installing Amazon DCV Session Manager CLI](#)
- [Installing Amazon DCV Session Manager CLI](#)

## Prerequisites for installing Amazon DCV Session Manager CLI

This section includes prerequisites for installing Amazon DCV Session Manager CLI on Linux, macOS, and Windows.

### Linux and macOS

- Python version 3.6 or later.
- Ability to extract or unzip a downloaded, compressed file. If your operating system doesn't have the built-in unzip command, use an equivalent.

### Windows

- Python version 3.6 or later.
- Python must be properly set in the PATH environment variable to run Amazon DCV Session Manager CLI using the startup script.

## Installing Amazon DCV Session Manager CLI

This section describes the process to install Amazon DCV Session Manager CLI on Linux, macOS, and Windows.

## Linux and macOS

### To Install Amazon DCV Session Manager CLI on Linux and macOS

1. Download the zipped package from the [Amazon DCV website](#).
2. Unzip the downloaded package. If your Linux distribution doesn't have a built-in unzip command, use an equivalent to unzip it. The following example command unzips the package and creates a directory that's named `nice-dcv-session-manager-cli-1.0.0-37` under the current directory.

```
$ unzip nice-dcv-session-manager-cli-1.0.0-37.zip
```

3. To validate the content of the zip file, run the following command inside the folder extracted in the previous step:

```
./dcvsm --version
```

## Windows Amazon DCV server

### To install Amazon DCV Session Manager CLI on Windows

1. Download the zipped package from the [Amazon DCV website](#).
2. Unzip the downloaded package.
3. To validate the content of the zip file, run the following command:

```
C:\> dcvsm --version
```



# Configuring the Amazon DCV Session Manager command line interface

This section provides instructions for configuring the settings of the Session Manager command line interface (CLI) for use with the Broker. Once you have configured these settings, you can perform session management tasks from the command line and able to automate remote desktop workflows in Amazon DCV servers.

To work with the CLI, you must register a Session Manager client with the broker and generate client credentials. Follow the process that's described in the [Broker CLI reference](#).

## Topics

- [Configuration basics](#)
- [Configuring the CLI settings](#)

## Configuration basics

The Amazon DCV Session Manager CLI has a set of configuration parameters that the user can specify. The following parameters are required:

- Broker URL
- Client ID
- Client password

The configuration parameters can be defined in the following three ways:

- Command line
- Environment variables
- Configuration file

## Configuring the CLI settings

The Amazon DCV Session Manager uses credentials and configuration settings that are located in multiple places. These include user environment variables, local Amazon DCV Session Manager

configuration file, or explicitly declared on the command line as a parameter. Certain locations take precedence over others.

The Amazon DCV Session Manager CLI credentials and configuration settings take precedence in the following order:

- Command line options– Overrides settings in any other location.
- Environment variables– Some values can be stored in your system's environment variables.
- CLI configuration file– Specify options in the configuration file.

## Topics

- [Command line options](#)
- [Environment variables](#)
- [Configuration file](#)

## Command line options

In the Amazon DCV Session Manager, you can use the following command line options to override the default configuration settings, any corresponding profile setting, or environment variable setting for that single command. You can't use command line options to directly specify credentials. Each option that takes an argument requires a space or equals sign (=) separating the argument from the option name.

### **--conf**

Specifies the path of the configuration file. If it's not defined the CLI will use the default configuration file. For more information about the configuration file, see [Configuration file](#).

Type: String

### **--broker-url**

Specifies the URL to send the request to.

Type: String

### **--debug**

A Boolean switch that enables debug logging. By default, the DCV SM CLI provides cleaned up information regarding any successes or failures regarding command outcomes in the command

output. The `--debug` option provides the full logs. This includes additional stderr diagnostic information about the operation of the command that can be useful when troubleshooting why a command provides unexpected results.

Type: Boolean

Type: String

### **--no-verify-ssl**

With this option, you can disable SSL certificate verification, but it's discouraged for security reasons. By default, the DCV SM CLI uses SSL when communicating with broker services.

Type: Boolean

### **--ca-bundle**

Specifies the path to a custom certificate bundle (a file with a `.pem` extension) of CA to use when establishing SSL/TLS connections

### **--auth-server-url**

Specifies the hostname of the authentication server that's used to request the OAuth 2.0 access token. If it's not specified, the broker url is used.

Type: String

### **--version**

Displays the current version of the DCV SM CLI program that's running.

Type: String

### **--help**

Display the list of options and commands of the DCV SM CLI.

Type: String

## **Environment variables**

Environment variables provide another way to specify some configuration options and credentials.

The following examples describe how you can configure environment variables for the default user.

## Set environment variables on Linux or macOS

Run the following commands to set environment variables on Linux or macOS:

```
$ export DCV_SM_AUTH_SERVER_URL=https://example.com
```

```
$ export DCV_SM_CLIENT_ID=ExampleClientID
```

Setting the environment variable changes the value that's used until the end of your shell session, or until you set the variable to a different value. You can make the variables persistent across future sessions by setting them in the startup script of your shell.

## Set environment variables on Windows

Run the following commands to set environment variables on Windows Command Prompt:

```
$ setx DCV_SM_AUTH_SERVER_URL https://example.com
```

```
$ setx DCV_SM_CLIENT_ID ExampleClientID
```

Using [set](#) to set an environment variable changes the value that's used until the end of the current command prompt session. Or, it's until you set the variable to a different value. Using [setx](#) to set an environment variable changes the value that's used in both the current command prompt session and all command prompt sessions. These sessions you create after running the command. It doesn't affect other command shells that are already running at the time you run the command.

## Set environment variables using PowerShell

Run the following commands to set environment variables using PowerShell:

```
$ $Env:DCV_SM_AUTH_SERVER_URL="https://example.com"
```

```
$ $Env:DCV_SM_CLIENT_ID="ExampleClientID"
```

If you set an environment variable at the PowerShell prompt as shown in the previous examples, it saves the value for only the duration of the current session. To make the environment variable setting persistent across all PowerShell and Command Prompt sessions, store it by using the *\*System\** application in *\*Control Panel\**. Alternatively, you can set the variable for all future

PowerShell sessions by adding it to your PowerShell profile. For more information about storing environment variables or persisting them across session, see [the PowerShell documentation](#).

## Amazon DCV Session Manager supported environment variables

Amazon DCV Session Manager supports the following environment variables:

- `DCV_SM_AUTH_SERVER_URL`

Specifies the hostname of the authentication server that's used to request the OAuth 2.0 access token. If defined, this environment variable overrides the value of the configuration file.

- `DCV_SM_CLIENT_ID`

The unique client ID that's used by the Session Manager client to retrieve an OAuth 2.0 access token.

- `DCV_SM_CLIENT_PASSWORD`

The password that's used by the Session Manager client to retrieve an OAuth 2.0 access token.

- `DCV_SM_OAUTH2_TOKEN`

The access token that's used to make an API request.

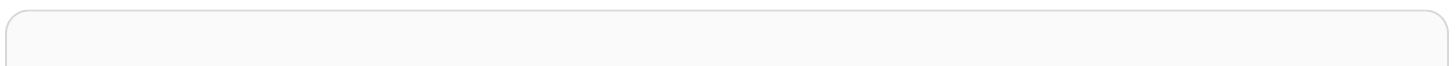
## Configuration file

The configuration file is the third way to specify some configuration options and credentials. By default, it's provided in the zip file at `/conf/dcvsmcli.conf`.

The user can specify the path of the configuration file at command line. If the user does not specify it explicitly the config file it will be read by default from a specific folder depending on the operating systems:

- Unix based systems: `$XDG_CONFIG_HOME/dcvsmcli.conf`
- Windows systems: `%UserProfile%\dcvsmcli.conf`

If the configuration file isn't found, the CLI reads the file from the path `/conf/dcvsmcli.conf` provided with the zip file. The configuration file is structured as follows:



```
[output]
# The formatting style for command output.
output-format = json

# Turn on debug logging
debug = true

[security]
# Disable SSL certificates verification.
no-verify-ssl = true

# CA certificate bundle to use when verifying SSL certificates.
ca-bundle = ca-bundle.pem

[authentication]
# hostname of the authentication server used to request the token
auth-server-url = https://broker-host:broker-port/oauth2/token?
grant_type=client_credentials

# The client ID
client-id = username

# The client password
client-password = password

[broker]
# hostname or IP of the broker
url = https://broker-host:broker-port
```

# Working with the Amazon DCV Session Manager CLI

Working with the CLI allows you to programmatically create, list, and control Amazon DCV sessions from the command line or within scripts. You can automate session management tasks, integrate Amazon DCV into custom workflows, and manage sessions at scale across multiple hosts.

This section introduces many of the common features and options available in the DCV SM Command Line Interface (DCV SM CLI). Some of the topics covered in this section are:

## Topics

- [Getting help with commands](#)
- [Using the command structure](#)
- [Using return codes](#)

## Getting help with commands

You can get help with any command when using the Amazon DCV Session Manager CLI. To do so, simply type `--help` at the end of a command name.

### Example

For example, the following command displays help for the general DCV SM CLI options and the available top-level commands.

```
dcvsm --help
```

The following example shows the output of the CLI help.

```
Usage: dcvsm [OPTIONS] COMMAND [ARGS]...
```

```
Amazon DCV Session Manager CLI
```

```
Options:
```

```
--conf TEXT          Name of the configuration file to read the
                      configuration parameters
--broker-url TEXT    The URL of the broker
--debug              Specify to enable the debug mode. By default is
```

```

disabled
--no-verify-ssl      Specify to disable the verification of SSL
                    certification. By default is enabled
--output-format TEXT Specify the format of the output
--ca-bundle TEXT    Specifies the path to a custom certificate bundle
                    (a file with a .pem extension) of CA to use when
                    establishing SSL/TLS connections
--auth-server TEXT  URL of the authentication server used to request
                    the token
--version           Show the version and exit.
-h, --help         Show this message and exit.

```

**Commands:**

```

close-servers          Closes one or more Amazon DCV server
create-session         Creates a new Amazon DCV session
delete-session        Deletes the specified Amazon DCV session
describe-servers      Describes one or more Amazon DCV servers
describe-sessions     Describes one or more Amazon DCV sessions
get-session-connection-data Gets connection data for a specific Amazon DCV session.
get-session-screenshots Gets screenshots of one or more Amazon DCV sessions.
open-servers          Opens one or more Amazon DCV servers
update-session-permissions Updates the user permissions for a specific Amazon DCV
session.

```

All commands accept `--help` for contextual help information. For example, the following command displays help for the `create-session` command.

```
dcvsm create-session --help
```

The following example shows the output for the `create-session --help` command.

```
Usage: dcvsm create-session [OPTIONS]
```

```
Create sessions API
```

**Options:**

```

--name TEXT          The name for the session [required]
--owner TEXT         The name of the session owner [required]
--type TEXT          Session type: CONSOLE|VIRTUAL [required]
--init-file-path TEXT Supported with virtual sessions on Linux
                    Amazon DCV servers
--autorun-file TEXT  The path to a file on the host server that
                    is to be run inside the session

```



```
--autorun-file-arguments TEXT  Command-line arguments passed to AutorunFile
                                upon its execution inside the session
--max-concurrent-clients INTEGER RANGE
                                The maximum number of concurrent Amazon DCV
                                clients, if provided must be between 1 and
                                100 [1<=x<=100]
--dcv-gl-enabled                Indicates whether the virtual session is
                                configured to use hardware-based OpenGL.
                                Specify to enable it, by default is disabled
--permissions-file TEXT         The Base64-encoded contents of the
                                permissions file
--requirements TEXT             The requirements that the server must
                                satisfy in order to place the session
--storage-root TEXT             Specifies the path to the folder used for
                                session storage
-h, --help                       Show this message and exit.
```

The Amazon DCV SM CLI Command Reference also contains the help content for all Amazon DCV SM CLI commands. All commands in the Amazon DCV SM CLI correspond to requests made to the APIs of the broker. Each API has an API reference that can be found on the Amazon DCV Session Manager Developer Guide section.

## Parameter types

If you're having trouble formatting an option or argument for a specific command, the help for each command describes its function and options accepted.

### String

String parameters can contain letters, numbers, and white space. Strings that contain white space must be surrounded by quotation marks. Strings can be surrounded by single quotation marks, double quotation marks, or without them. We recommend that you don't use symbols because it can cause unexpected results.

### List

One or more strings separated by comma and surrounded by quotation marks. The following example shows a list of `--session-ids`.

```
dcvsm describe-sessions --session-ids "session123,session456"
```

## Boolean

Binary flag that turns an option on or off. For example, `--debug describe-sessions` has a Boolean `--debug` option that, when specified, calls the API enabling the debugging.

```
dcvsm --debug describe-sessions
```

If you don't specify explicitly a boolean option, it's set to `FALSE` by default.

## Integer

An unsigned, whole number.

```
dcvsm describe-sessions --max-results 2
```

## Using the command structure

This topic covers how the Amazon DCV Session Manager CLI command is structured. The CLI uses a multipart structure on the command line that must be specified in this order:

1. `./dcvsm`–The base call to the program.
2. `[options]`– Corresponds to common options that's used by all the commands. You can specify these in any order.
3. `commands`– Specifies which operation to perform.
4. `args`– Corresponds to the arguments required by the command. For a list of arguments, see [Amazon DCV Session Manager CLI reference](#).

## Syntax reference

```
dcvsm [options] commands args
```

Arguments can take various types of input values. These include numbers, strings, boolean. What is supported is dependent upon the command that you specify.

## Using return codes

A return code is usually, but not always, a hidden code sent after running a Amazon DCV Session Manager CLI command describing its status.

To view these return codes, you can use the `echo` command. This displays the code sent from the last Session Manager CLI command. YOU can use these codes to determine if a command was successful or not and why a command may have an error.

In addition to the return codes, you can view more details about a failure by running your commands with `--debug`. This produces a detailed report of the steps the Session Manager CLI uses to process the command and the result of each step.

To determine the return code of a DCV SM CLI command, run one of the following commands immediately after running the CLI command.

- Linux and macOS

```
$ echo $?  
0
```

- Windows PowerShell

```
$ echo $lastexitcode  
0
```

- Windows command prompt

```
$ echo %errorlevel%  
0
```

The following return codes appear at the end of execution of a CLI command:

- `0` The command was successful. There were no errors thrown by either the CLI or by the service that the request was made to.
- `1` The configuration file parsed to the CLI was not found or might be corrupt.

- 2 The command entered on the command line failed to be parsed. Parsing failures can be caused by, but are not limited to, missing any required subcommands or arguments or using any unknown commands or arguments. Note that this return code meaning is applicable to all CLI commands.
- 130 The process received a SIGINT (Ctrl-C).
- 252 Command syntax was invalid, an unknown parameter was provided, or a parameter value was incorrect and prevented the command from running.
- 253 The system environment or configuration was invalid. While the command provided may be syntactically valid, missing configuration or credentials prevented the command from running.
- 254 The command was successfully parsed and a request was made to the specified service but the service returned an error. This will generally indicate incorrect API usage or other service specific issues.
- 255 General catch-all error. The command may have parsed correctly but an unspecified runtime error occurred when running the command. Because this is a general error code, an error may change from 255 to a more specific return code. A return code of 255 shouldn't be relied on to determine a specific error case.

# Amazon DCV Session Manager CLI reference

The CLI allows you to perform a variety of session management tasks, including launching new sessions, listing active sessions, getting connection information for sessions, and terminating sessions. This section documents the available CLI commands and their usage.

Use the following commands to interact with the Amazon DCV server.

- [open-servers](#)
- [describe-servers](#)
- [close-servers](#)

Use the following commands to interact with the Amazon DCV session.

- [create-session](#)
- [describe-sessions](#)
- [get-session-connection-data](#)
- [get-session-screenshots](#)
- [update-session-permissions](#)
- [delete-session](#)

## close-servers

Closes one or more Amazon DCV servers. When you close a Amazon DCV server, you make it unavailable for Amazon DCV session placement. You can't create Amazon DCV sessions on closed servers. Closing a server ensures that no sessions are running on it and that users can't create new sessions on it.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
close-servers  
--server-ids <value>  
[--force]
```

## Options

### --server-ids

The comma-separated list of IDs of the Amazon DCV servers to close.

Type: String

Required: Yes

### --force

Operation that forces the server to close. By default, this is disabled.

Type: Boolean

Required: No

## Example

```
dcvsm close-servers --server-ids "server123,server456"
```

## create-session

Creates a new Amazon DCV session with the specified details.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
create-session
--name <value>
--owner <value>
--type <value>
[--init-file-path <value>]
[--autorun-file <value>]
[--autorun-file-arguments <value>]
[--max-concurrents-clients <value>]
[--dcv-gl-enabled]
[--permissions-file <value>]
[--requirements <value>]
[--storage-root <value>]
[--enqueue-request <value>]
```

## Options

### --name

The name of the session.

Type: String

Required: Yes

### --owner

The name of the session owner.

Type: String

Required: Yes

### --type

The session type. This is either Console or Virtual.

Type: Choice

Required: Yes

**--init-file-path**

The path to the custom script on the Amazon DCV server to run for initializing the session when it's created. The file path is relative to the `init` directory specified for the `agent.init-folder` Agent configuration parameter.

Type: String

Required: No

**--autorun-file**

The path to a file on the host server that's to be run inside the session. The file path is relative to the `autorun` directory specified for the `agent.autorun-folder` Agent configuration parameter.

Type: String

Required: No

**--autorun-file-arguments**

The command-line arguments passed to `AutorunFile` when it's run inside the session.

Type: String

Required: No

**--max\_concurrent\_clients**

The maximum number of concurrent Amazon DCV clients. If provided, this must be between 1 and 100.

Type: Integer

Required: No

**--dcv-gl-enabled**

Configures the virtual session to use hardware-based OpenGL. It's disabled by default.

Type: Boolean

Required: No



**--permissions-file**

The path to the permissions file.

Type: String

Required: No

**--requirements**

The requirements that the server must meet to place the session.

Type: String

Required: No

**--storage-root**

The path to the folder used for session storage.

Type: String

Required: No

**--enqueue-request**

Indicates whether to queue the request if it cannot be immediately fulfilled. Requests are not enqueued by default.

Type: Boolean

Required: No

## Example

```
dcvsm create-session --name session123 --owner sessionOwner  
--type Console --requirements "server:Host.Os.Family = 'windows'"
```

## delete-session

Deletes the specified Amazon DCV session, and removes it from the cache of the broker.

## Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
delete-session  
--session-id <value>  
--owner <value>  
[--force]
```

## Options

### **--session-id**

The ID of the session to delete.

Type: String

Required: Yes

### **--owner**

The owner of the session to delete.

Type: String

Required: Yes

### **--force**

The operation to ensure a session is removed from the cache of the broker. By default, this is disabled.

Type: Boolean

Required: No

## Example

```
dcvsm delete-session --session-id session123 --owner sessionOwner
```

```
--force
```

## describe-servers

Describe the specified Amazon DCV server.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
describe-servers  
[--server-ids <value>]  
[--next-token <value>]  
[--max-results <value>]
```

## Options

### --server-ids

The comma-separated list of IDs of the Amazon DCV servers to describe.

Type: String

Required: No

### --next-token

The token to use to retrieve the next page of results.

Type: String

Required: No

### --max-results

The maximum number of results to be returned by the request in paginated output. If provided, this must be a number between 1 and 1000.

Type: Integer

Required: No

## Example

```
dcvsm describe-servers --server-ids "server123,server456"
```

## describe-sessions

Describes one or more Amazon DCV servers.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
describe-sessions  
[--session-ids <value>]  
[--next-token <value>]  
[--owner <value>]  
[--max-results <value>]
```

## Options

### --session-ids

The comma-separated list of IDs of the Amazon DCV sessions to describe.

Type: String

Required: No

### --next-token

The token to retrieve the next page of results.

Type: String

Required: No

**--owner**

The owner of the session to describe.

Type: String

Required: No

**--max-results**

The number of results to show. If provided, must be between 1 and 1000.

Type: Integer

Required: No

## Example

```
dcvsm describe-sessions --session-ids "session123,session456"
```

## get-session-connection-data

Gets connection information for a specific user's connection to a specific Amazon DCV session.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
get-session-connection-data  
--session-id <value>  
--user <value>
```

## Options

### **--session-id**

The ID of the Amazon DCV sessions to get connection data from.

Type: String

Required: Yes

### **--user**

The name of the user to view connection information for.

Type: Boolean

Required: Yes

## Example

```
./dcvsm get-session-connection-data --session-id session123  
--user dcvuser
```

## get-session-screenshots

Gets screenshots of one or more Amazon DCV sessions.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
get-session-screenshots  
--session-ids <value>
```

## Options

### **--session-ids**

The comma-separated list of IDs of the Amazon DCV sessions to get the screenshots from.

Type: String

Required: Yes

## Example

```
./dcvsm get-session-screenshots --session-id session123
```

## open-servers

Opens one or more Amazon DCV servers. Before you can create sessions on a Amazon DCV server, you must change the server's state to open. After the Amazon DCV server is open, you can create Amazon DCV sessions on the server.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
open-servers  
--server-ids <value>
```

## Options

### **--server-ids**

The comma-separated list of IDs of the Amazon DCV servers to open.

Type: String

Required: Yes

## Example

```
./dcvsm open-servers --server-ids "server123,server456"
```

## update-session-permissions

Updates the user permissions for a specific Amazon DCV session.

### Topics

- [Synopsis](#)
- [Options](#)
- [Example](#)

## Synopsis

```
update-session-permissions  
--session-id <value>  
--owner <value>  
--permission-file <value>
```

## Options

### --session-id

The ID of the session to change the permissions for.

Type: String

Required: Yes

### --owner

The owner of the session to change the permissions for.

Type: String



Required: Yes

### **--permission-file**

The path to the permissions file.

Type: String

Required: Yes

## **Example**

```
./dcvsm update-session-permissions --session-id session123  
--owner Owner --permission-file path_to_file
```

# Release notes and document history for Amazon DCV Session Manager

This page provides the release notes and document history for Amazon DCV Session Manager.

## Topics

- [Amazon DCV Session Manager release notes](#)
- [Document history](#)

## Amazon DCV Session Manager release notes

This section provides an overview of the major updates, feature releases, and bug fixes for Amazon DCV Session Manager. All the updates are organized by release date. We update the documentation frequently to address the feedback that you send us.

## Topics

- [2024.0-457— October 1, 2024](#)
- [2023.1-17652— August 1, 2024](#)
- [2023.1-16388— June 26, 2024](#)
- [2023.1— November 9, 2023](#)
- [2023.0-15065— May 4, 2023](#)
- [2023.0-14852— March 28, 2023](#)
- [2022.2-13907— November 11, 2022](#)
- [2022.1-13067— June 29, 2022](#)
- [2022.0-11952— February 23, 2022](#)
- [2021.3-11591— December 20, 2021](#)
- [2021.2-11445— November 18, 2021](#)
- [2021.2-11190— October 11, 2021](#)
- [2021.2-11042— September 01, 2021](#)
- [2021.1-10557— May 31, 2021](#)
- [2021.0-10242— April 12, 2021](#)

- [2020.2-9662— December 04, 2020](#)
- [2020.2-9508— November 11, 2020](#)

## 2024.0-457— October 1, 2024

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 457</li><li>• Agent: 748</li><li>• CLI: 140</li></ul>	<ul style="list-style-type: none"><li>• Rebranded NICE DCV to Amazon DCV.</li><li>• Added support for Ubuntu 24.04.</li></ul>

## 2023.1-17652— August 1, 2024

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 426</li><li>• Agent: 748</li><li>• CLI: 140</li></ul>	<ul style="list-style-type: none"><li>• Bug fixes and performance improvements.</li></ul>

## 2023.1-16388— June 26, 2024

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 417</li><li>• Agent: 748</li><li>• CLI: 140</li></ul>	<ul style="list-style-type: none"><li>• Fixed a bug that showed memory incorrectly as TB, not GB.</li><li>• Bug fixes and performance improvements.</li></ul>

## 2023.1— November 9, 2023

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 410</li></ul>	<ul style="list-style-type: none"><li>• Bug fixes and performance improvements</li></ul>

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Agent: 732</li><li>• CLI: 140</li></ul>	

## 2023.0-15065— May 4, 2023

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 392</li><li>• Agent: 675</li><li>• CLI: 132</li></ul>	<ul style="list-style-type: none"><li>• Added support for Red Hat Enterprise Linux 9, Rocky Linux 9, and CentOS Stream 9 on ARM platforms.</li></ul>

## 2023.0-14852— March 28, 2023

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 392</li><li>• Agent: 642</li><li>• CLI: 132</li></ul>	<ul style="list-style-type: none"><li>• Added support for Red Hat Enterprise Linux 9, Rocky Linux 9, and CentOS Stream 9.</li></ul>

## 2022.2-13907— November 11, 2022

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 382</li><li>• Agent: 612</li><li>• CLI: 123</li></ul>	<ul style="list-style-type: none"><li>• Added a Substate field in DescribeSessions response.</li><li>• Fixed a problem that could cause the CLI to fail to connect to the broker depending on the URL in use.</li></ul>

## 2022.1-13067— June 29, 2022

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 355</li><li>• Agent: 592</li><li>• CLI: 114</li></ul>	<ul style="list-style-type: none"><li>• Added support to run the broker on Amazon Graviton instances.</li><li>• Added agent and broker support for Ubuntu 22.04.</li></ul>

## 2022.0-11952— February 23, 2022

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 341</li><li>• Agent: 520</li><li>• CLI: 112</li></ul>	<ul style="list-style-type: none"><li>• Added log rotation capability to the Agent.</li><li>• Added configuration parameter to set Java home in the Broker.</li><li>• Improved data flushing from cache to disk in the Broker.</li><li>• Fixed URL validation in the CLI.</li></ul>

## 2021.3-11591— December 20, 2021

Build numbers	New features
<ul style="list-style-type: none"><li>• Broker: 307</li><li>• Agent: 453</li><li>• CLI: 92</li></ul>	<ul style="list-style-type: none"><li>• Added support for integrating with the Amazon DCV Connection Gateway.</li><li>• Added Broker support for Ubuntu 18.04 and Ubuntu 20.04.</li></ul>

## 2021.2-11445— November 18, 2021

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"><li>• Broker: 288</li><li>• Agent: 413</li><li>• CLI: 54</li></ul>	<ul style="list-style-type: none"><li>• Fixed a problem with the validation of login names which include a Windows domain.</li></ul>

## 2021.2-11190— October 11, 2021

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"> <li>• Broker: 254</li> <li>• Agent: 413</li> <li>• CLI: 54</li> </ul>	<ul style="list-style-type: none"> <li>• Fixed a problem in the command line interface which prevented from launching Windows sessions.</li> </ul>

## 2021.2-11042— September 01, 2021

Build numbers	New features	Changes and bug fixes
<ul style="list-style-type: none"> <li>• Broker: 254</li> <li>• Agent: 413</li> <li>• CLI: 37</li> </ul>	<ul style="list-style-type: none"> <li>• Amazon DCV Session Manager now offers command line interface (CLI) support. You can create and manage Amazon DCV sessions in the CLI, instead of calling APIs.</li> <li>• Amazon DCV Session Manager introduced Broker data persistence. For higher availability, brokers can persist server state information on an external data store and restore the data at startup.</li> </ul>	<ul style="list-style-type: none"> <li>• When registering an external authorization server, you can now specify the algorithm that the authorization server uses to sign JSON-formatted Web Tokens. With this change, you can use Azure AD as an external authorization server.</li> </ul>

## 2021.1-10557— May 31, 2021

Build numbers	New features	Changes and bug fixes
<ul style="list-style-type: none"> <li>• Broker: 214</li> <li>• Agent: 365</li> </ul>	<ul style="list-style-type: none"> <li>• Amazon DCV Session Manager added support for input parameters passed to the autorun file on Linux.</li> </ul>	<ul style="list-style-type: none"> <li>• We fixed a problem with the autorun file on Windows.</li> </ul>

Build numbers	New features	Changes and bug fixes
	<ul style="list-style-type: none"> <li>Server properties can now be passed as requirements to the <a href="#">CreateSessions</a> API.</li> </ul>	

## 2021.0-10242— April 12, 2021

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"> <li>Broker: 183</li> <li>Agent: 318</li> </ul>	<ul style="list-style-type: none"> <li>Amazon DCV Session Manager introduced the following new APIs: <ul style="list-style-type: none"> <li><a href="#">OpenServers</a></li> <li><a href="#">CloseServers</a></li> <li><a href="#">DescribeServers</a></li> <li><a href="#">GetSessionScreenshots</a></li> </ul> </li> <li>It also introduced the following new configuration parameters: <ul style="list-style-type: none"> <li><a href="#">Broker parameters</a>: <code>session-screenshot-max-width</code> , <code>session-screenshot-max-height</code> , <code>session-screenshot-format</code> , <code>create-sessions-queue-max-size</code> , and <code>create-sessions-queue-max-time-seconds</code> .</li> <li><a href="#">Agent parameters</a>: <code>agent.autorun_folder</code> , <code>max_virtual_sessions</code> , and <code>max_concurrent_sessions_per_user</code> .</li> </ul> </li> </ul> <p><a href="#">Agent parameters</a>: <code>agent.autorun_folder</code> , <code>max_virtual_sessions</code> , and <code>max_concurrent_sessions_per_user</code> .</p> <p><a href="#">Agent parameters</a>: <code>agent.autorun_folder</code> , <code>max_virtual_sessions</code> , and <code>max_concurrent_sessions_per_user</code> .</p>

## 2020.2-9662— December 04, 2020

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"> <li>• Broker: 114</li> <li>• Agent: 211</li> </ul>	<ul style="list-style-type: none"> <li>• We fixed a problem with the auto-generated TLS certificates that prevented the Broker from starting.</li> </ul>

## 2020.2-9508— November 11, 2020

Build numbers	Changes and bug fixes
<ul style="list-style-type: none"> <li>• Broker: 78</li> <li>• Agent: 183</li> </ul>	<ul style="list-style-type: none"> <li>• The initial release of Amazon DCV Session Manager.</li> </ul>

## Document history

The following table describes the documentation for this release of Amazon DCV Session Manager.

Change	Description	Date
Amazon DCV Version 2024.0-457	Amazon DCV Session Manager has been updated for Amazon DCV 2024.0-457. For more information, see <a href="#">2024.0-457— October 1, 2024</a> .	September 30, 2024
Amazon DCV Version 2023.1-17652	Amazon DCV Session Manager has been updated for Amazon DCV 2023.1-17652. For more information, see <a href="#">2023.1-17652— August 1, 2024</a> .	August 1, 2024
Amazon DCV Version	Amazon DCV Session Manager has been updated for Amazon DCV	June 26, 2024



Change	Description	Date
2023.1-16388	2023.1-16388. For more information, see <a href="#">2023.1-16388— June 26, 2024</a> .	
Amazon DCV Version 2023.1	Amazon DCV Session Manager has been updated for Amazon DCV 2023.1. For more information, see <a href="#">2023.1— November 9, 2023</a> .	November 9, 2023
Amazon DCV Version 2023.0	Amazon DCV Session Manager has been updated for Amazon DCV 2023.0. For more information, see <a href="#">2023.0-14852— March 28, 2023</a> .	March 28, 2023
Amazon DCV Version 2022.2	Amazon DCV Session Manager has been updated for Amazon DCV 2022.2. For more information, see <a href="#">2022.2-13907— November 11, 2022</a> .	November 11, 2022
Amazon DCV Version 2022.1	Amazon DCV Session Manager has been updated for Amazon DCV 2022.1. For more information, see <a href="#">2022.1-13067— June 29, 2022</a> .	June 29, 2022
Amazon DCV Version 2022.0	Amazon DCV Session Manager has been updated for Amazon DCV 2022.0. For more information, see <a href="#">2022.0-11952— February 23, 2022</a> .	February 23, 2022
Amazon DCV Version 2021.3	Amazon DCV Session Manager has been updated for Amazon DCV 2021.3. For more information, see <a href="#">2021.3-11591— December 20, 2021</a> .	December 20, 2021
Amazon DCV Version 2021.2	Amazon DCV Session Manager has been updated for Amazon DCV 2021.2. For more information, see <a href="#">2021.2-11042— September 01, 2021</a> .	September 01, 2021

Change	Description	Date
Amazon DCV Version 2021.1	Amazon DCV Session Manager has been updated for Amazon DCV 2021.1. For more information, see <a href="#">2021.1-10 557— May 31, 2021</a> .	May 31, 2021
Amazon DCV Version 2021.0	Amazon DCV Session Manager has been updated for Amazon DCV 2021.0. For more information, see <a href="#">2021.0-10 242— April 12, 2021</a> .	April 12, 2021
Initial release of Amazon DCV Session Manager	The first publication of this content.	November 11, 2020