



We use optional cookies to improve your experience on our websites, such as through social media connections, and to display personalized advertising based on your online activity. If you reject optional cookies, only cookies necessary to provide you the services will be used. You may change your selection by clicking “Manage Cookies” at the bottom of the page. [Privacy Statement](#) [Third-Party Cookies](#)

Accept

Reject

Manage cookies

# Microsoft Ignite

Nov 19–22, 2024

Register now >



Learn

Discover ▾

Product documentation ▾

Development languages ▾

Topics ▾



Sign in

## Windows App Development

Explore ▾

Development ▾

Platforms ▾

Troubleshooting

Resources ▾

Dashboard

Filter by title

Setup API

> Overview

> Creating Setup Applications

< Reference

Reference

> Functions

> Structures (Setup API)

> Notifications

Error Codes (Setup API)

Run and RunOnce Registry Keys

... / Desktop Technologies / System Services / Setup API /



# Run and RunOnce Registry Keys

Article • 07/19/2024 • 8 contributors

Feedback

Use `Run` or `RunOnce` registry keys to make a program run when a user logs on. The `Run` key makes the program run every time the user logs on, while the `RunOnce` key makes the program run one time, and then the key is deleted. These keys can be set for the user or the machine.

The data value for a key is a command line no longer than 260 characters. Register programs to run by adding entries of the form *description-string=commandline*. You can write multiple entries under a key. If more than one program is registered under any particular key, the order in which those programs run is indeterminate.

The Windows registry includes the following four `Run` and `RunOnce` keys:

- HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run
- HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows\CurrentVersion\RunOnce
- HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Run
- HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\RunOnce

### Important

HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows\CurrentVersion\RunOnce only executes when members of the Administrators group log on after the reboot. Additional details can be found in the articles [RunOnce Registry Key](#), [Developing Applications that Run at Logon](#), and [Troubleshooting Windows client](#).

By default, the value of a `RunOnce` key is deleted before the command line is run. You can prefix a `RunOnce` value name with an exclamation point (!) to defer deletion of the value until after the command runs. Without the exclamation point prefix, if the `RunOnce` operation fails, the associated program will not be asked to run the next time you start the computer.

By default, these keys are ignored when the computer is started in Safe Mode. The value name of `RunOnce` keys can be prefixed with an asterisk (\*) to force the program to run even in Safe Mode.

A program that is run from any of these keys should not write to the key during its execution because this will interfere with the execution of other programs registered under the key. Applications should use the `RunOnce` key only for transient conditions, such as to complete

 Download PDF

application setup. An application must not continually recreate entries under `RunOnce` because this will interfere with Windows Setup.

## Related topics

[Windows Registry](#), [RunOnce Registry Key](#)

## Feedback

Was this page helpful? Yes No

[Provide product feedback](#) | [Get help at Microsoft Q&A](#)

## Additional resources

### Training

Module  
[Troubleshoot Windows startup - Training](#)

This module examines the Windows startup architecture and discusses the methods used to troubleshoot client startup issues.

### Events

Nov 20, 12 AM - Nov 22, 12 AM

Gain the competitive edge you need with powerful AI and Cloud solutions by attending Microsoft Ignite online.

[Register now](#)