**Winlogon**

A part of the Windows operating system that provides interactive logon support.

Winlogon is designed around an interactive logon model that consists of three parts: the Winlogon executable, a Graphical Identification and Authentication dynamic-link library (DLL) referred to as the GINA, and any number of network providers.

# Initializing Winlogon

When [Winlogon](https://msdn.microsoft.com/en-us/library/windows/desktop/aa380542(v=vs.85).aspx) initializes, it registers the CTRL+ALT+DEL [secure attention sequence](https://msdn.microsoft.com/en-us/library/windows/desktop/ms721625(v=vs.85).aspx#_security_secure_attention_sequence_gly) (SAS) with the system, and then creates three desktops within the WinSta0(window station object) window station.

Registering CTRL+ALT+DEL makes this initialization the first process, thus ensuring that no other application has hooked that key sequence.

WinSta0 is the name of the window station object that represents the physical screen, keyboard and mouse. Winlogon creates the following desktops in the WinSta0 object.

|  |  |
| --- | --- |
| **Desktop** | **Description** |
| Winlogon desktop | This is the desktop that Winlogon and [GINA](https://msdn.microsoft.com/en-us/library/windows/desktop/ms721584(v=vs.85).aspx#_security_gina_gly) use for interactive identification and authentication, and other secure dialog boxes. Winlogon automatically switches to this desktop when it receives SAS event notification. |
| Application desktop | Each time a user successfully logs on, an application desktop is created for that [logon session](https://msdn.microsoft.com/en-us/library/windows/desktop/ms721592(v=vs.85).aspx#_security_logon_session_gly). The application desktop is also known as the default or user desktop. This desktop is where all user activity takes place. The application desktop is protected; only the system and the interactive logon session have access to it. Note that only a particular instance of the logged-on user has access to the desktop. If the interactive user activates a process using the service controller, that service application will not have access to the application desktop. |
| Screen saver desktop | This is the current desktop when a screen saver is running. If a user is logged on, both the system and the interactive logon session have access to the desktop. Otherwise, only the system has access to the desktop. |

## ****Explorer Initialization****

The ExplorerInit subphase begins when Explorer.exe starts. During ExplorerInit, the system creates the desktop window manager (DWM) process, which initializes the desktop and displays it for the first time.

**Boot Phase Explorer Initialization – Phase Activity**

The list of activities for this phase are –

* Explorer.exe starts
* Desktop Window Manager starts
* The desktop is displayed for the first time
* Auto-start (Run-keys) applications are launched

**RunOnce Registry Key:**

Windows support a registry key, **RunOnce**, which can be used to specify commands that the system will execute one time and then delete.

In the absence of **RunOnce** applications, most of the time in this phase should be spent initializing the Explorer process. Explorer reads a number of libraries and data files into memory during its initialization process.