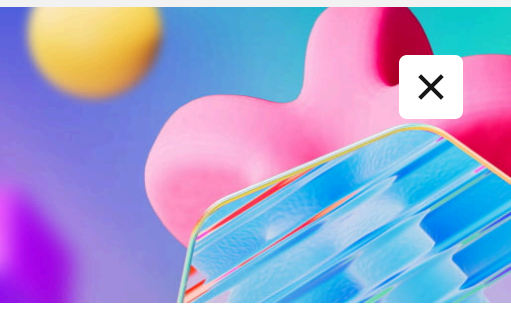
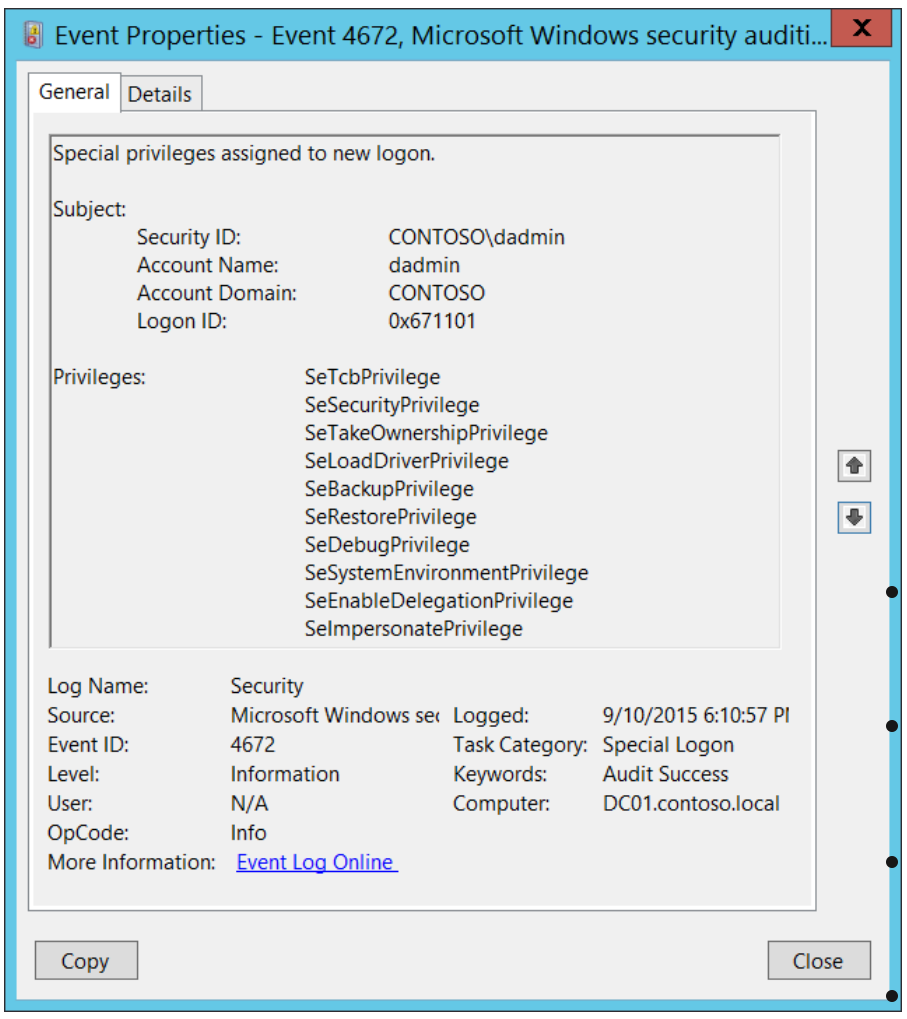


4672(S): Special privileges assigned to new logon.

Article • 09/07/2021 • 1 contributor



Subcategory: Audit Special Logon

Event Description:

This event generates for new account logons if any of the following sensitive privileges are assigned to the new logon session:

- SeTcbPrivilege - Act as part of the operating system
- SeBackupPrivilege - Back up files and directories
- SeCreateTokenPrivilege - Create a token object
- SeDebugPrivilege - Debug programs
- SeEnableDelegationPrivilege - Enable computer and user accounts to be trusted for delegation
- SeAuditPrivilege - Generate security audits
- SeImpersonatePrivilege - Impersonate a client after authentication
- SeLoadDriverPrivilege - Load and unload device drivers
- SeSecurityPrivilege - Manage auditing and security log
- SeSystemEnvironmentPrivilege - Modify firmware environment values
- SeAssignPrimaryTokenPrivilege - Replace a process-level token

- SeRestorePrivilege - Restore files and directories,
- SeTakeOwnershipPrivilege - Take ownership of files or other objects

You typically will see many of these events in the event log, because every logon of SYSTEM (Local System) account triggers this event.

> **Note** For recommendations, see Security Monitoring Recommendations for this event.

Event XML:

Copy

```
- <Event xmlns="http://schemas.microsoft.com/win/2004/08/events/event">
- <System>
 <Provider Name="Microsoft-Windows-Security-Auditing" Guid="{54849625-5478-4994-
 <EventID>4672</EventID>
 <Version>0</Version>
 <Level>0</Level>
 <Task>12548</Task>
 <Opcode>0</Opcode>
 <Keywords>0x8020000000000000</Keywords>
 <TimeCreated SystemTime="2015-09-11T01:10:57.091809600Z" />
 <EventRecordID>237692</EventRecordID>
 <Correlation />
 <Execution ProcessID="504" ThreadID="524" />
 <Channel>Security</Channel>
 <Computer>DC01.contoso.local</Computer>
 <Security />
 </System>
- <EventData>
 <Data Name="SubjectUserSid">S-1-5-21-3457937927-2839227994-823803824-1104</Data
 <Data Name="SubjectUserName">dadmin</Data>
 <Data Name="SubjectDomainName">CONTOSO</Data>
 <Data Name="SubjectLogonId">0x671101</Data>
 <Data Name="PrivilegeList">SeTcbPrivilege SeSecurityPrivilege SeTakeOwnershipPr
 </EventData>
 </Event>
```

Required Server Roles: None.

Minimum OS Version: Windows Server 2008, Windows Vista.

Event Versions: 0.

Field Descriptions:

Subject:

- **Security ID** [Type = SID]**:** SID of account to which special privileges were assigned. Event Viewer automatically tries to resolve SIDs and show the account name. If the SID cannot be resolved, you will see the source data in the event.

> **Note** A **security identifier (SID)** is a unique value of variable length used to identify a trustee (security principal). Each account has a unique SID that is issued by an authority, such as an Active Directory domain controller, and stored in a security database. Each time a user logs on, the system retrieves the SID for that user from the database and places it in the access token for that user. The system uses the SID in the access token to identify the user in all subsequent interactions with Windows security. When a SID has been used as the unique identifier for a user or group, it cannot ever be used again to identify another user or group. For more information about SIDs, see Security identifiers.

- **Account Name** [Type = UnicodeString]**:** the name of the account to which special privileges were assigned.

- **Account Domain** [Type = UnicodeString]: subject's domain or computer name. Formats vary, and include the following:
  - Domain NETBIOS name example: CONTOSO
  - Lowercase full domain name: contoso.local
  - Uppercase full domain name: CONTOSO.LOCAL
  - For some well-known security principals, such as LOCAL SERVICE or ANONYMOUS LOGON, the value of this field is "NT AUTHORITY".
  - For local user accounts, this field will contain the name of the computer or device that this account belongs to, for example: "Win81".
- **Logon ID** [Type = HexInt64]: hexadecimal value that can help you correlate this event with recent events that might contain the same Logon ID, for example, "4624: An account was successfully logged on."

Privileges [Type = UnicodeString]: the list of sensitive privileges, assigned to the new logon.

The following table contains the list of possible privileges for this event:

Expand table

Privilege Name	User Right Group Policy Name	Description
SeAssignPrimaryTokenPrivilege	Replace a process-level token	Required to assign the *primary token* of a process. With this privilege, the user can initiate a process to replace the default token associated with a started subprocess.
SeAuditPrivilege	Generate security audits	With this privilege, the user can add entries to the security log.
SeBackupPrivilege	Back up files and directories	- Required to perform backup operations. With this privilege, the user can bypass file and directory, registry, and other persistent object permissions for the purposes of backing up the system. This privilege causes the system to grant all read access control to any file, regardless of the *access control list* (ACL) specified for the file. Any access request other than read is still evaluated with the ACL. The following access rights are granted if this privilege is held: READ_CONTROL ACCESS_SYSTEM_SECURITY FILE_GENERIC_READ FILE_TRAVERSE
SeCreateTokenPrivilege	Create a token object	Allows a process to create a token which it can then use to get access to any local resources when the process uses NtCreateToken() or other token-creation APIs. When a process requires this privilege, we recommend using the LocalSystem account (which already includes the privilege), rather than creating a separate user account and assigning this privilege to it.
SeDebugPrivilege	Debug programs	Required to debug and adjust the memory of a process owned by another account. With this privilege, the user can attach a debugger to any process or to the kernel. We recommend that SeDebugPrivilege always be granted to Administrators, and only to Administrators. Developers who are debugging their own applications do not need this user right.

		Developers who are debugging new system components need this user right. This user right provides complete access to sensitive and critical operating system components.
SeEnableDelegationPrivilege	Enable computer and user accounts to be trusted for delegation	Required to mark user and computer accounts as trusted for delegation. With this privilege, the user can set the **Trusted for Deleg**ation setting on a user or computer object. The user or object that is granted this privilege must have write access to the account control flags on the user or computer object. A server process running on a computer (or under a user context) that is trusted for delegation can access resources on another computer using the delegated credentials of a client, as long as the account of the client does not have the **Account cannot be delegated** account control flag set.
SeImpersonatePrivilege	Impersonate a client after authentication	With this privilege, the user can impersonate other accounts.
SeLoadDriverPrivilege	Load and unload device drivers	Required to load or unload a device driver. With this privilege, the user can dynamically load and unload device drivers or other code in to kernel mode. This user right does not apply to Plug and Play device drivers.
SeRestorePrivilege	Restore files and directories	Required to perform restore operations. This privilege causes the system to grant all write access control to any file, regardless of the ACL specified for the file. Any access request other than write is still evaluated with the ACL. Additionally, this privilege enables you to set any valid user or group SID as the owner of a file. The following access rights are granted if this privilege is held: WRITE_DAC WRITE_OWNER ACCESS_SYSTEM_SECURITY FILE_GENERIC_WRITE FILE_ADD_FILE FILE_ADD_SUBDIRECTORY DELETE With this privilege, the user can bypass file, directory, registry, and other persistent objects permissions when restoring backed up files and directories and determines which users can set any valid security principal as the owner of an object.
SeSecurityPrivilege	Manage auditing and security log	Required to perform a number of security-related functions, such as controlling and viewing audit events in security event log. With this privilege, the user can specify object access auditing options for individual resources, such as files, Active Directory objects, and registry keys. A user with this privilege can also view and clear the security log.
SeSystemEnvironmentPrivilege	Modify firmware environment values	Required to modify the nonvolatile RAM of systems that use this type of memory to store configuration information.
SeTakeOwnershipPrivilege	Take ownership of files or other objects	Required to take ownership of an object without being granted discretionary access. This privilege allows the owner value to be set only to those values that the holder may legitimately assign as the owner of an object. With this privilege, the user can take ownership of any securable object in the system, including

		Active Directory objects, files and folders, printers, registry keys, processes, and threads.
SeTcbPrivilege	Act as part of the operating system	This privilege identifies its holder as part of the trusted computer base. This user right allows a process to impersonate any user without authentication. The process can therefore gain access to the same local resources as that user.

Security Monitoring Recommendations

For 4672(S): Special privileges assigned to new logon.

> **Important** For this event, also see Appendix A: Security monitoring recommendations for many audit events.

- Monitor for this event where "**Subject\Security ID**" is *not* one of these well-known security principals: LOCAL SYSTEM, NETWORK SERVICE, LOCAL SERVICE, and where "**Subject\Security ID**" is not an administrative account that is expected to have the listed **Privileges**.
- If you have a list of specific privileges which should never be granted, or granted only to a few accounts (for example, SeDebugPrivilege), use this event to monitor for those "**Privileges**."
- If you are required to monitor any of the sensitive privileges in the Event Description for this event, search for those specific privileges in the event.