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# Security Identifier (SID)

SID (Security Identifier) is a unique value of variable length that is used to identify a user (or group) account in Windows operating systems.

#### Security Identifier Structure

SID Field	Description
Revision	Revision level
SubAuthorityCount	SubAuthority count.
IdentifierAuthority	IdentifierAuthority is 48-bit number that is usually presented as 3 numbers (16 bits each) IdentifierAuthority[0], IdentifierAuthority[2] and IdentifierAuthority[3]
SubAuthority	A variable number of SubAuthority or Relative Identifier (RID) values that uniquely identify the trustee relative to the authority that issued the SID

To help visualize the components of the SID, a standardized string notation is used in the following order - S-R-I-S-S... - w here:

- "S" identifies the series of digits as an SID
- "R" is the revision level
- "I" is the identifier-authority value
- "S" is one or more subauthority values

The following example uses this notation to display the well-known domain-relative SID of the local Administrators group:

#### S-1-5-32-544

In this example, the SID has the following components:

- A revision level of "1".
- An identifier-authority value of "5" (SECURITY\_NT\_AUTHORITY).
- A first subauthority value of "32" (SECURITY\_BUILTIN\_DOMAIN\_RID).
- A second subauthority value of "544" (DOMAIN\_ALIAS\_RID\_ADMINS).

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