

# Splunk® Enterprise Installation Manual 7.1.0

## **Choose the Windows user Splunk Enterprise should** run as

Generated: 5/18/2018 11:04 am

### Choose the Windows user Splunk Enterprise should run as

When you install Splunk Enterprise on Windows, the software lets you select the Windows user that it should run as.

### The user you choose depends on what you want Splunk Enterprise to monitor

The user that Splunk Enterprise runs as determines what Splunk Enterprise can monitor. The Local System user has access to all data on the local machine by default, but nothing else. A user other than Local System has access to whatever data you want, but you must give the user that access before you install Splunk Enterprise.

#### About the Local System user and other user choices

The Windows Splunk Enterprise installer provides two ways to install it:

- As the Local System user
- As another existing user on your Windows computer or network, which you designate

To do any of the following actions with Splunk Enterprise, you must install it as a domain user:

- Read Event Logs remotely
- Collect performance counters remotely
- Read network shares for log files
- Access the Active Directory schema using Active Directory monitoring

The user that you specify must meet the following requirements. If the user does not satisfy these requirements, Splunk Enterprise installation might fail. Even if installation succeeds, Splunk Enterprise might not run correctly, or at all.

- Be a member of the Active Directory domain or forest that you want to monitor (when using AD)
- Be a member of the local Administrators group on the server on which you install Splunk Enterprise
- Be assigned specific user security rights

If you are not sure which user Splunk Enterprise should run as, then see Considerations for deciding how to monitor remote Windows data in the *Getting Data In* manual for information on how to configure the Splunk Enterprise user with the access it needs.

#### User accounts and password concerns

The user that you select to run Splunk Enterprise as also has unique password constraints.

If you have a password enforcement security policy on your Windows network, that policy controls the validity of any user passwords. If that policy enforces password changes, you must do one of the following to keep Splunk Enterprise services running:

- Before the password expires, change it, reconfigure Splunk Enterprise services on every machine to use the changed password, and then restart Splunk Enterprise on each machine.
- Configure the account that Splunk Enterprise uses so that its password never expires.
- Use a managed service account. See "Use managed service accounts" later in this topic.

#### Use managed service accounts

You can use a managed service account (MSA) to run Splunk Enterprise if you can meet all of the following conditions:

- You run Windows Server 2008 R2 or later, or Windows 8 or later in Active Directory
- At least one domain controller in your Active Directory runs Windows Server 2008 R2 or later

The benefits of using an MSA are:

- Increased security from the isolation of accounts for services.
- Administrators no longer need to manage the credentials or administer the
  accounts. Passwords automatically change after they expire. They do not
  have to manually set passwords or restart services associated with these
  accounts.
- Administrators can delegate the administration of these accounts to non-administrators.

Some important things to understand before you install Splunk Enterprise with an MSA are:

- The MSA requires the same permissions as a domain account on the machine that runs Splunk Enterprise.
- The MSA must be a local administrator on the machine that runs Splunk Enterprise.
- You cannot use the same account on different machines, as you would with a domain account.
- You must correctly configure and install the MSA on the machine that runs Splunk Enterprise before you install Splunk Enterprise on the machine.
   See Service Accounts Step-by-Step Guide on MS Technet.

To install Splunk Enterprise using an MSA, see Prepare your Windows network for a Splunk Enterprise installation as a network or domain user.

#### Security and remote access considerations

#### Minimum permissions requirements

If you install Splunk Enterprise as a domain user, the machine that runs the instance requires that some default permissions change.

The splunkd and splunkforwarder services require specific user rights when you install Splunk Enterprise using a domain user. Depending on the sources of data you want to monitor, the Splunk Enterprise user might need additional rights. Failure to set these rights might result in a failed Splunk Enterprise installation, or an installation that does not function correctly.

#### Required basic permissions for the splunkd or splunkforwarder services

- Full control over the Splunk Enterprise installation directory.
- Read access to any files that you want to index.

### Required Local/Domain Security Policy user rights assignments for the splunkd or splunkforwarder services

- Permission to log on as a service.
- Permission to log on as a batch job.
- Permission to replace a process-level token.
- Permission to act as part of the operating system.
- Permission to bypass traverse checking.

#### How to assign these permissions

This section provides guidance on how to assign the appropriate user rights and permissions to the Splunk Enterprise service account before you install. For procedures, see Prepare your Windows network for a Splunk Enterprise installation as a network or domain user.

#### Use Group Policy to assign rights to multiple machines

To assign the policy settings to a number of machines in your AD forest, you can define a Group Policy object (GPO) with these rights, and deploy the GPO across the forest.

After you create and enable the GPO, the machines in the forest pick up the changes, either during the next scheduled AD replication cycle (usually every 1.5 to 2 hours), or at the next boot time. Alternatively, you can force AD replication by using the GPUPDATE command-line utility on the machine that you want to update Group Policy.

When you set user rights with a GPO, those rights override identical Local Security Policy rights on a machine. You cannot change this setting. To retain the Local Security Policy rights, you must assign those rights within the GPO.

#### Troubleshoot permissions issues

The rights described are the rights that the <code>splunkd</code> and <code>splunkforwarder</code> services require to run. The data you want to access might require that you assign additional rights. Many user rights assignments and other Group Policy restrictions can prevent Splunk Enterprise from running. If you have problems, consider using a tool such as Process Monitor or the <code>GPRESULT</code> command line tool to troubleshoot GPO application in your environment.