

## Overview

[Overview](#) / [Product overview](#) / [System objects](#) / Credentials

## Credentials

A credential object specifies the user authentication information required to access an SFTP server or another application. You can use credentials with input devices, steps, and data transmitters that need access to other servers or applications.

If multiple input devices or steps access the same SFTP site with the same credentials, you can specify the user authentication information once in the Credential object and then select that credential in the step or input device that needs it.

RICOH ProcessDirector provides support for the following types of credentials:

### *Credentials for input devices and steps*

#### *Password*

Password credentials use a user name and password for authentication.

#### *SSH Key*

SSH key credentials require a private key in OpenSSL (traditional SSLeay) or PKCS#8 format. Different utility programs to generate SSH keys are available on each operating system.

If the credentials change and you have multiple input devices or steps that use the same ones, you can edit the Credential object and the new values will be used automatically in all of those places.

### *Credentials for data transmitters*

#### *Static*

Static credentials use an authorization code to connect to an application. A user or application can use the same credential repeatedly.

#### *Session*

Session credentials use a password to connect to an application and retrieve temporary authentication data, such as a token. The token is valid for the current communication session with the application and then it expires.

#### *Ricoh cloud*

Ricoh cloud credentials use a one-time code to generate a certificate. When the certificate is obtained, it can be used to connect to Ricoh cloud applications, such as RICOH Predictive Insight. The RICOH Predictive Insight Connect feature adds support for the Ricoh cloud credential type.

Parent topic: [System objects](#)