SCUtils General Printer Management Pack

Solution for Microsoft System Center 2012/2016/2019 Operations Manager

Published: 16th May 2019

Version: 1.0

Authors:

Marat Kuanyshev

Feedback:

support@scutils.com

Contents

1. Getting started

SCUtils General Printer Management Pack is an extension for Microsoft System Center 2012/2016/2019 Operations Manager to monitor printers. The product is based on RFC 3805 (Printer MIB v2). The management pack is designed to support all types of the network printers.

All other trademarks are property of their respective owners.

2. Compatibility

SCUtils General Printer Management Pack has been designed and tested for the following versions of Microsoft System Center 2012 Operations Manager:

- Microsoft System Center 2012 Operations Manager R2
- Microsoft System Center 2016 Operations Manager
- Microsoft System Center 2019 Operations Manager
- Microsoft System Center Operations Manager Semi-Annual Channel builds 1801 and 1807

There is a possibility that SNMP OID of some particular printers is not recognized by the management pack. In this case, please send us the printer's OID and model name and we will add a support for this type of the printers to the next version of the management pack.

2.1. Try before buy

SCUtils General Printer Management Pack has a unified installer for trial and full versions and can be obtained on http://www.scutils.com on the Download page. We highly recommend to evaluate the software in a testing environment before an implementing in the production environment.

The free 15-day trial version is fully functional and offers every feature of the product and has a license for 5 printers. Please become familiar with this guide before starting using **SCUtils General Printer Management Pack** and do not hesitate to contact us at support@scutils.com with any questions. You are also more than welcome to our YouTube channel where you will find video tutorials for **SCUtils General Printer Management Pack** and our other products.

2.2. Feedback

Our team is always on the way of the improvement of our solutions. We highly appreciate every feedback from our customers. Please send us your thoughts, complains, and feature requests at support@scutils.com.

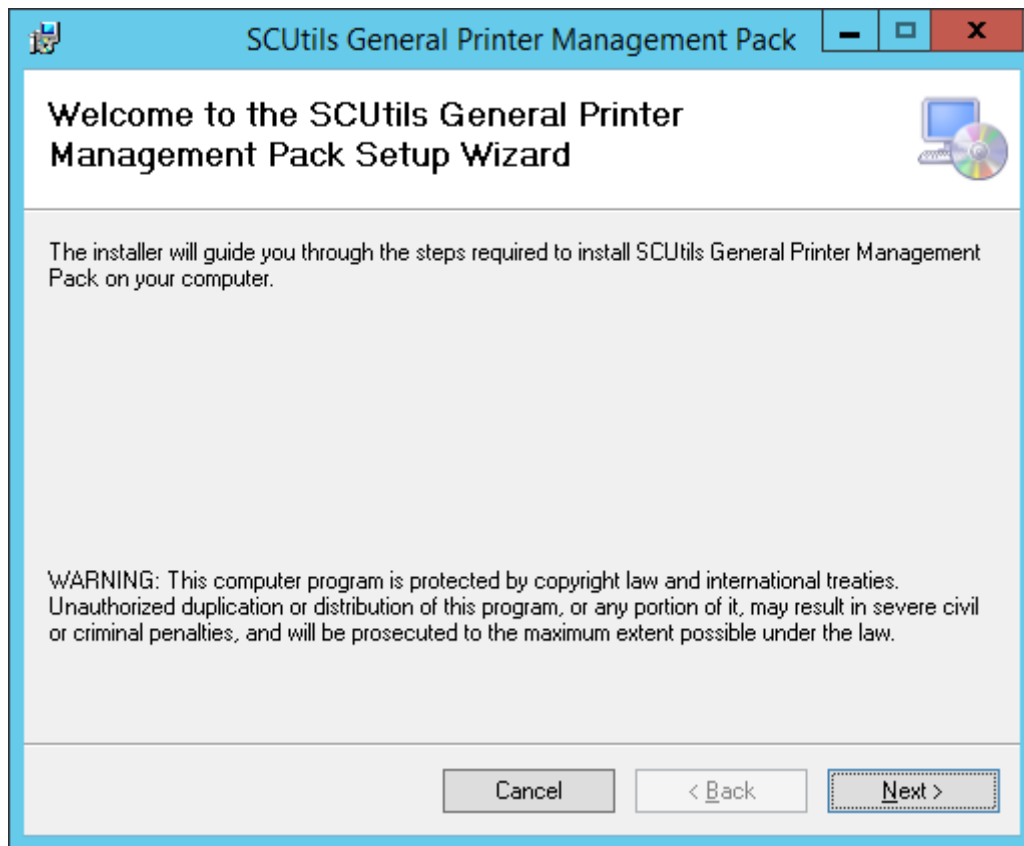# 3. Requirements

All printers must be discovered as network devises. Please refer to the Operations Manager guide to details.

4. Installation

Download the installation package **SCUtils General Printer Management Pack Setup.msi** from Download page of www.scutils.com. Copy the installation package to the Operations Manager management server.

Run **SCUtils General Printer Management Pack Setup.msi** file on the server.

Fig.1 Installing

Follow the installation wizard steps (Fig.1). On the **Select Installation Folder** page you can change the location in which **SCUtils General Printer Management Pack** will be installed.

After the successful installation, the installation folder will be opened automatically.
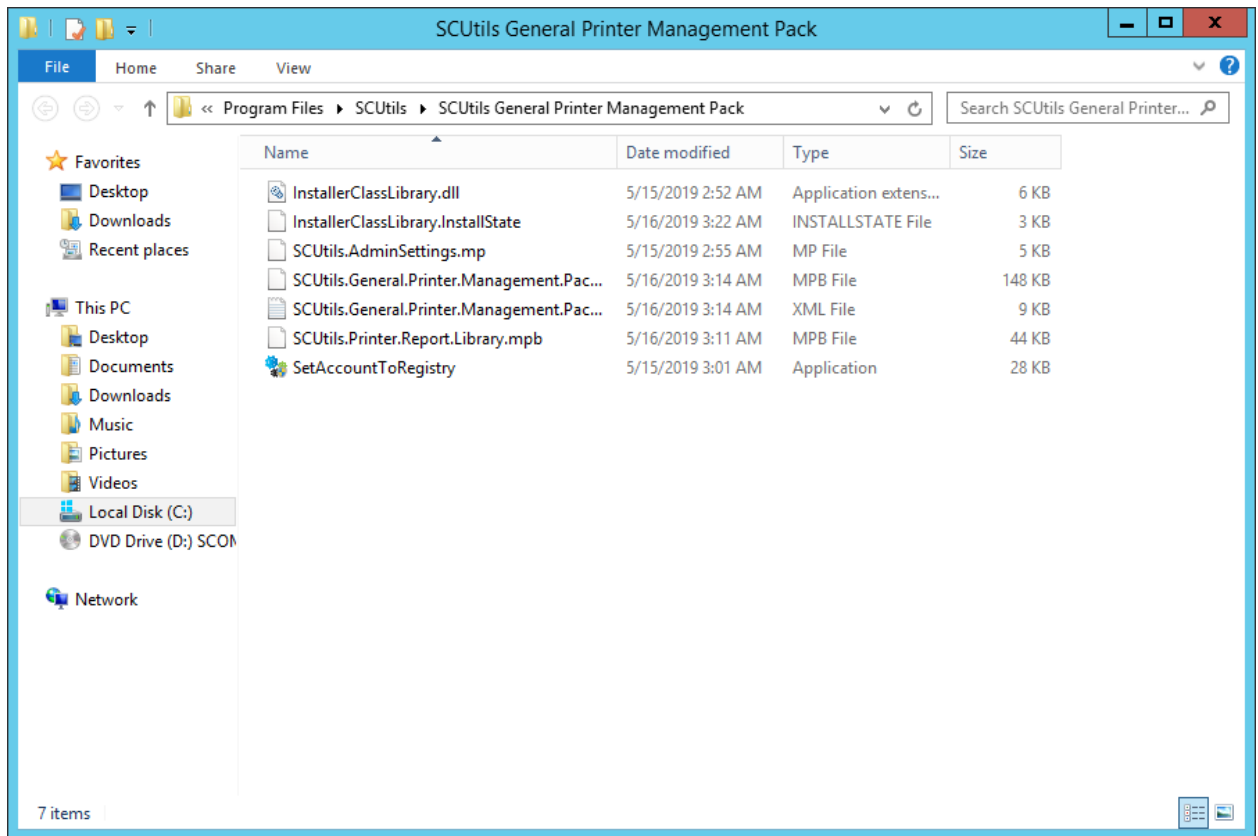
Fig. 2 Installation folder

To install the management packs:

1. Log on to the computer that hosts the **Operations Manager console** using an account that administrative rights in the Operations Manager.
2. In the Operations Manager console, select **Administration**.
3. In the **Administration** pane, select **Management Packs.**
4. In the **Tasks** pane, under **Actions**, click **Import Management Packs**.
5. In the **Select Management Packs** box, click on **Add** button, select **Add from disk**, in the **Online Catalog Connection** dialog select **No**.
6. In the **Select Management Packs to Import** box, point to the location of **SCUtils General Printer Management Pack** installation folder (the default path is '*C:\Program Files\SCUtils\ SCUtils General Printer Management Pack*').
7. In the list of files, select the management packs **SCUtils.AdminSettings.mp** (might be already presented if you have deployed our other products) and **SCUtils.General.Printer.Management.Pack.mpb**, and then click **Open**.
8. In the window **Import Management Packs,** click **Install**.
9. The management pack named **SCUtils.Printer.Report.Library.mpb** includes reports. You may also install it if you need them.
10. If you want to speed up the discovery process, you can also install **SCUtils.General.Printer.Management.Pack.Overrides.xml** management pack.

After the installation you have to activate your copy of the software. There are two ways to activate the product: online (recommended) and offline.

4.1. Using with gateway servers

If you plan to use Operations Manager gateway server as members of a resource pool to monitor printers, you have the following actions in this manner:

1. Install the **Operations Manager console** on **each gateway server** that is a member of a resource pool for monitoring printers.
2. Adjust a firewall if a gateway server and its management server are separated by the firewall.
3. Specify the **credentials** for an account that will be used to connect to a management server of the gateway. This action has to be performed on **each gateway server** that is a member of a resource pool for monitoring printers.

If the gateway server and management server are separated by a firewall, you have to adjust the firewall to open the following ports in both directions between the gateway server and its management server:

1. TCP 5723
2. TCP 5724

Please refer to the [Microsoft article](#) to find an additional information about ports used by Operations Manager servers.

If you have already specified the **credentials** on gateway servers for **other SCUtils products**, you don't need to repeat the procedure. If not, you need to set the credentials for the connectivity.

To specify the credentials:

1. Prepare an account that is a member of **Operations Manager Read-Only Operators** group.
2. Copy **SetAccountToRegistry.exe** from the installation folder (the default path is '*C:\Program Files\SCUtils\ SCUtils General Printer Management Pack*') to **each gateway server** that is a member of a resource pool for monitoring printers.
3. Run **SetAccountToRegistry.exe** using a local administrator account.
4. Fill in all the required fields.
5. Click on **Test** button.
6. If the connectivity test has succeeded, click on **Save** button (the password will be encrypted before saving). Otherwise, reenter the information and try to test again.
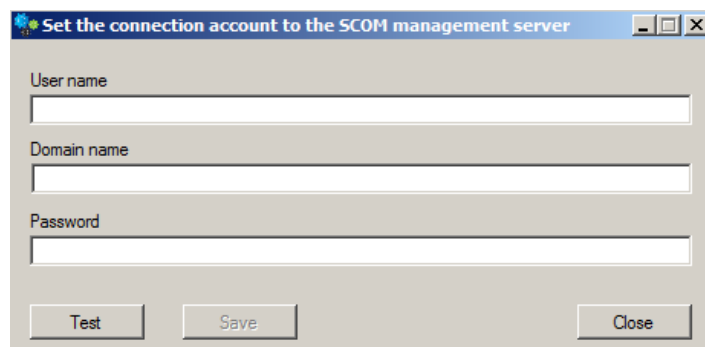7. Repeat the procedure on **each gateway server** that is a member of a resource pool for monitoring printers.

Fig. 3 SetAccountToRegistry dialog.

4.2. Online activation

Run the Operations Manager console under an Operations Manager administrative account on the computer connected to internet. Open **SCUtils General Printer Management Pack Activation** to activate the copy of the product:

1. In the Operations Manager console, select **Administration.**
2. In the **Administration** pane, expand **SCUtils Settings**.

8

3. In the **SCUtils Products Activation** view, click **SCUtils General Printer Management Pack Activation.**
4. In the **Tasks** pane, under **SCUtils General Printer Management Pack Activation Tasks**, click **Activate**.
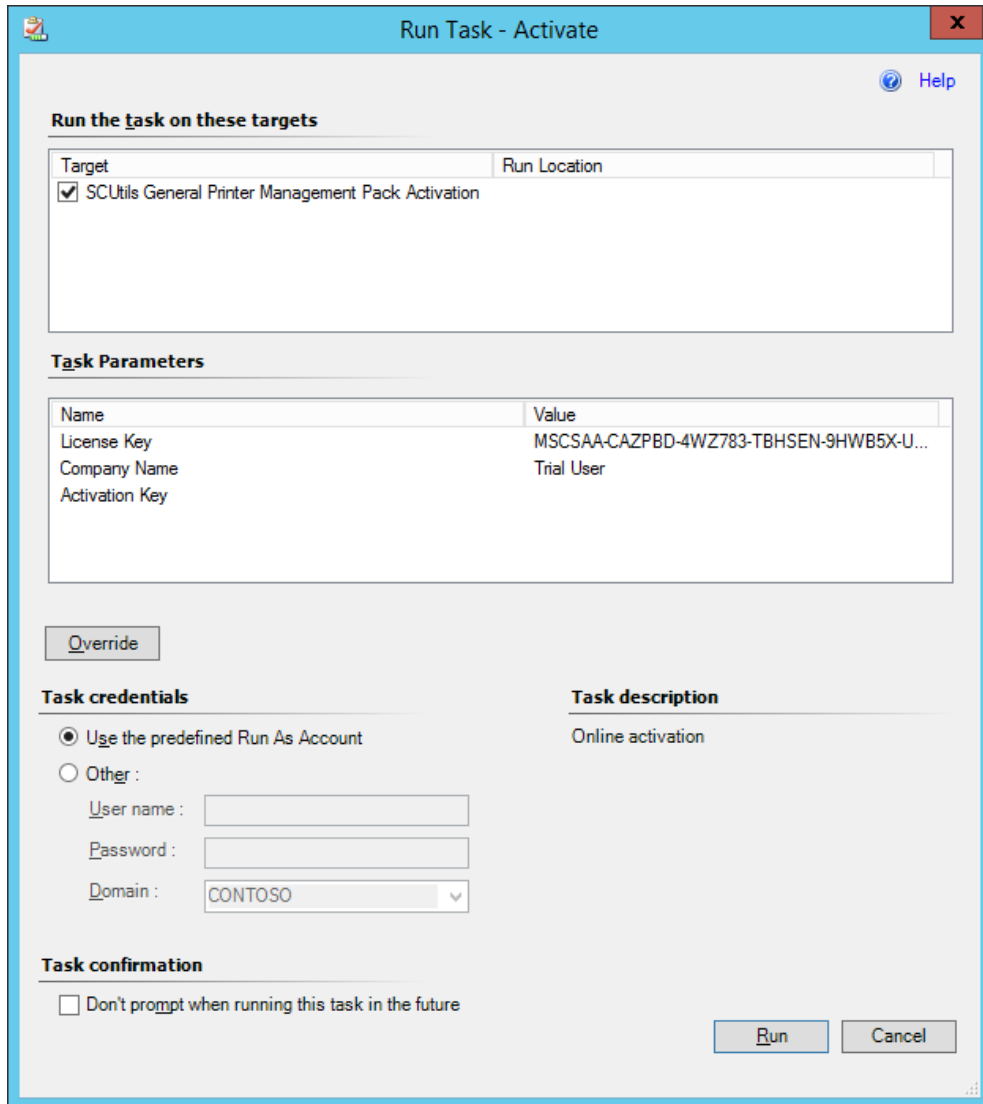5. **Run Task - Activate** window will be opened (Fig.4).

Fig.4 SCUtils General Printer Management Pack Activation

If you want to evaluate the product, simply click on **Run** button.

If you want to activate a full version, click on **Override** button, then define new values for **CompanyName** and **LicenseKey** (exactly as in the license), then click on **Run** button.

*If the management server haven't finished the deployment of the management pack's resources, you could receive errors or the task will stay in a scheduled state. In this case, just wait for 2-5 minutes and run the **Activate** task again.*

If you have any issues with the activation process or are not able to use the online activation, please send your **Unique ID** at support@scutils.com and we will provide you with an offline **Activation Key**.

To get the **Unique ID** of your environment, use **Get a Unique ID for an offline activation** task.

4.3. Offline activation

If you prefer to activate offline or for some reasons you are not able to use the online activation, send your **Unique ID** at support@scutils.com and specify what activation type you need (trial or full) and we will provide you with offline **Activation Key**.

After you receive the Activation Key, use **Override** button fill out **CompanyName**, **LicenseKey,** and **ActivationKey** (of just **ActivationKey** for a trial activation), then click on **Run** button.

5. Uninstallation

To uninstall **SCUtils General Printer Management Pack,** log in the Operations Manager management server where the product was installed. Open **Control Panel**, click on **Uninstall a program**, select **SCUtils General Printer Management Pack**, and click on **Uninstall**.

Open Operations Manager's console, go to **Administration** -> **Management Packs.** Select **SCUtils General Printer Management Pack** and click on **Delete** task. If required, delete all depending management pack as well. If you don't have any other SCUtils products, you can also delete **SCUtils Base Settings Library** management pack.

6. Using SCUtils General Printer Management Pack

Once you complete the activation process, you can start using **SCUtils General Printer Management Pack**.

The folder **Printer** in **Monitoring** contains all relevant information.

6.1. Discovery printers

After the successful activation the discovery process will start. The default intervals for discoveries have different values. It allows to discover all printers within a few hours. You can use override to specify shorter intervals to speed up the process. The installation folder includes a management pack named **SCUtils.General.Printer.Management.Pack.Overrides.xml**. You could import it to set the intervals for all discoveries to 300 seconds (5 minutes). When the discovery is over, please don't forget to delete this management pack (**SCUtils General Printer Management Pack Overrides**) or change the discovery intervals.

After the discovery is completed, please use overrides to increase the discovery intervals to **86400** seconds (24 hours). Please refer to the Operations Manager guide to details.

During the discovery you may notice some errors and warnings in the Operations Manager's log related to rules and monitors of the solution. When the discovery is finally over, they will disappear.

To change the scope in the Object Discoveries view in the Authoring Pane, please filter objects by '*printer*'.
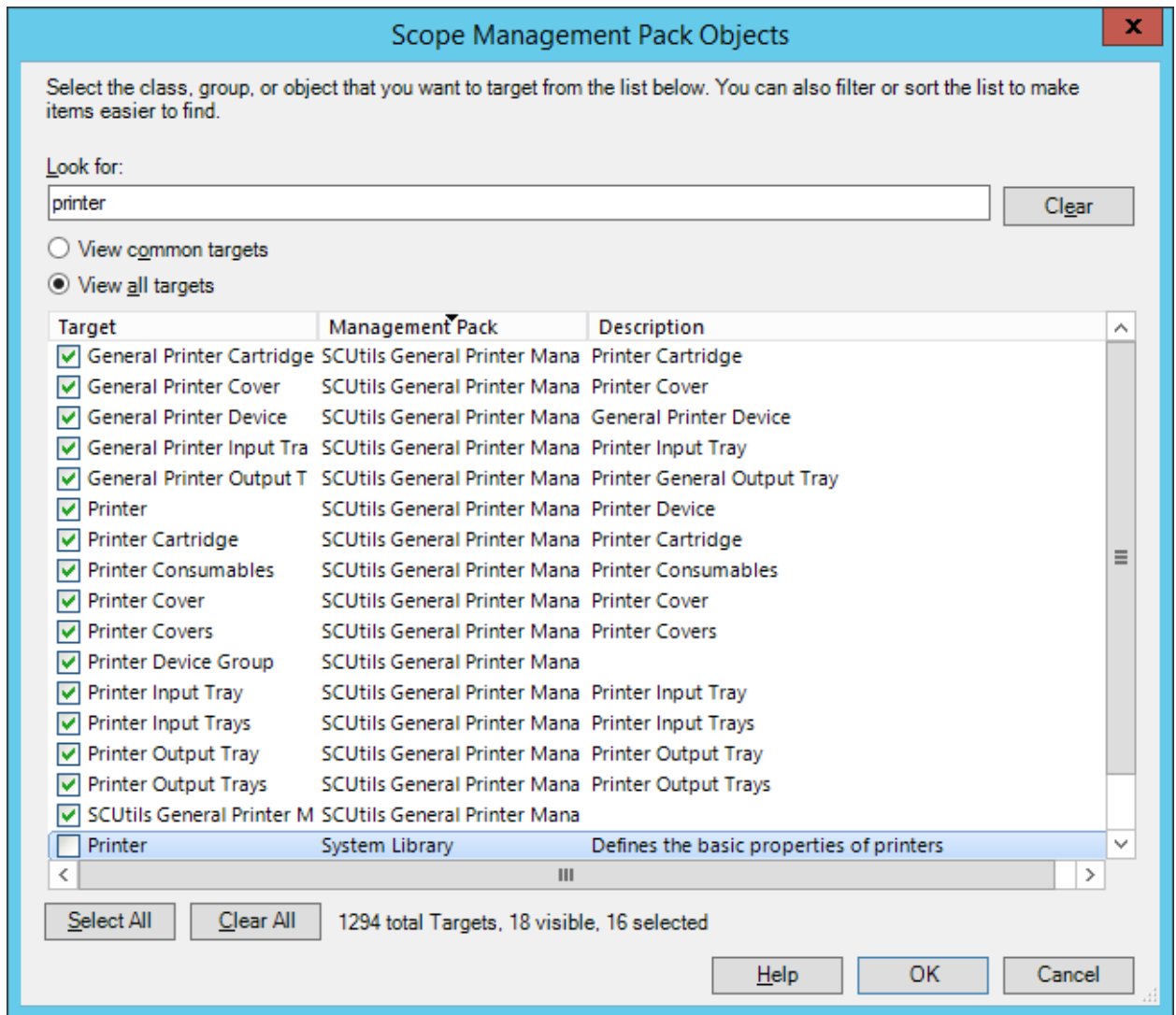
Fig. 5 Changing the scope in Object Discoveries

6.2. Monitors

SCUtils General Printer Management Pack uses monitors to control the state of printer's components.

All monitors are enabled by default. Please use overrides to disable any monitor if required.

6.2.1. Printer Cover Status

The current status of this cover sub-unit.

6.2.2. Consumables Status

The current level if this supply is a container; the remaining space if this supply is a receptacle.

6.2.3. Printer Input Tray Status

The current status of this input sub-unit.

6.2.4. Printer Output Tray Status

The current status of this Output sub-unit.

6.3. Informative rules

6.3.1. Printer general alert

The rule lists all the critical and non-critical alerts currently active in the printer.

6.3.2. Consumables Capacity

The current level if this supply is a container; the remaining space if this supply is a receptacle.

6.3.3. Input Tray Capacity

The current capacity of the input tray.

6.3.4. Output Tray Capacity

The current capacity of the Output tray. The data is available if the printer supports this feature.

6.3.5. Count of Printed Pages in Units Of Measure

The count of the number of units of measure counted during the life of printer.

6.3.6. Count of Printed Pages in Units of Measure since the Last Printer was turned On

The count of the number of units of measure counted since the equipment was most recently powered on.

6.4. Reports

SCUtils Printer Report Library (SCUtils.Printer.Report.Library.mpb) management pack includes 2 reports available in the Reporting workspace.

Please let the reports collect data at least 48 hours before a first use for a daily aggregation and at least 2 hours for an hourly aggregation.

Printed pages report is supported only on SQL 2012 version or later.

7. Known issues and troubleshooting

Here we describe the known issues. If you haven't found a solution in this section, please contact us at support@scutils.com.

7.1. The Activate task fails to complete

If you've just installed the management packs and try to activate the product, the Activate task may fail to complete. It happens because the management servers require some time to complete the deployment of the management pack's resources. Please wait for 2-5 minutes and try to activate again. If the task fails again, just give a bit more time and repeat the attempt.