SOP Modifying printer security

As you saw in the SOP *Reporting on printer security*, the DACL for a printer   
defines what access Windows allows to the printer. To change the set of permissions, you need to change the DACL. You could, for example, update the DACL on the Sales Group printer to just allow members of the Sales Group to print on the printer. This recipe updates the DACL to enable the AD Sales Group to print to the Sales Group printer.

Getting ready

Before you can run this SOP, you need to create a group in the AD. In this recipe, you use a group, Sales Group, contained in the Sales OU. To create the OU, the domain local   
group, do the following:

# Creating the OU and Group

$SB = { New-ADOrganizationalUnit -Name 'Sales'   
 -Path 'DC=Reskit,DC=Org'   
 New-ADGroup -Name 'Sales Group'   
 -Path 'OU=Sales,DC=Reskit,DC=Org'   
 -GroupScope DomainLocal

}

Invoke-Command -ComputerName DC1 -ScriptBlock $SB

How to do it...

1.Define the user who is to be given access to this printer and get the group's   
security principal details:

$GroupName = 'Sales Group'

$Group = New-Object -Typename   
 Security.Principal.NTAccount `   
 -Argumentlist $GroupName

2.Next, get the group's SID:

$GroupSid = $Group.Translate([Security.Principal.   
 Securityidentifier]).Value

3.Now define the SDDL that gives this user access to the printer:

$SDDL = 'O:BAG:DUD:PAI(A;OICI;FA;;;DA)' +   
 '(A;OICI;0x3D8F8;;;$GroupSid)'

4.Display the details:

'Group Name : {0}' -f $GroupName   
 'Group SID : {0}' -f $GroupSid   
 'SDDL : {0}' -f $SDDL

5.Get the Sales Group printer object:

$SGPrinter = Get-Printer -Name SGCP1

6.Set the Permissions:

$SGPrinter | Set-Printer -Permission $SDDL

How it works...

In *step 1*, you use New-Object to get the security principal details for the Sales Group   
from the Active Directory. In *step 2*, you use this object's Translate method to retrieve the SID for the group.

In *step 3*, you define the SDDL that is used to set permissions. In this step, as a sanity check, you can see the information you use to set the DACL. The output looks like this:



In *step 5*, you get the printer object for the Sales Group printer, and in *step 6*, you update   
the printer with the SDDL string you created in *step 3*. That sets the Sales Group printer's   
DACL. You can verify the results by rerunning the SOP *Reporting on printer security* .