BASIS ADMINISTRATION TIPS

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Personalization of your SAP system via logon screen, splash screen & 2 others

1) Adding text to the SAP logon screen. This is very handy for identifying which SAP system the user is about to log onto, especially non production boxes. You can also warn them here of pending changes, updates or outages. Because it is up while they are typing in their userid and password, they can't claim they missed the system message. SAP icons like the stop sign and warning signs can also be displayed. Details can be found in **OSS note #205487**. Here are the guts:

Before Release 4.6 the logon screen, program SAPMSYST screen 0020, was modified for this.As of Release 4.6, no modification is necessary any longer

Warning

*If you modify screen SAPMSYST 0020 (in older releases), then note that you may only insert text elements. Changes to the flow logic, for example, by inserting subscreen, force a change in program SAPMSYST. SAP strongly recommends not changing the system program SAPMSYST because by doing so, serious problems may arise (for example, **the dialog logon is no longer possible**!)*

Go to Transaction SE61 and select the document 'General text' (selection via F4 help), and create a text with the name ZLOGIN_SCREEN_INFOin the language defined with profile parameter zcsa/system_language.

If the text does not exist in the system language, no output is made.

Note that there is space for 16 lines with 45 fixed-font characters each or for approximately 60 proportional space font characters on the logon screen.

Title lines (can be recognized by means of format keys starting with a 'U') are highlighted in the display.

You may also output icons at the beginning of lines by using an icon code (for example, @1D@ for the STOP icon). You can get a list of icon codes from Report RSTXICON. Pay attention to the codes with two '@' symbols displayed by the report. You cannot include text symbols. The 'include indicator' cannot be used for this function. SUBHINT here. These can be used on system messages as well.

Creating/changing this text requires a changeable system. Therefore, for production systems, SAP recommends maintaining the text in the upstream system and then transporting it. To do this, select a transportable (customer) development class when you create the text and save the active version prior to the export. The transport is done via the transport object R3TR DOCT ZLOGIN_SCREEN_INFO The text can be changed in the

original system only (see TADIR entry R3TR DOCT ZLOGIN_SCREEN_INFO). When making a change in a non-original system, a modified text would be generated which cannot be represented sensefully on the initial screen.

2) Changing the splash screen on the main menu can add some pizzazz to the otherwise boring screen. It can also be changed easily on a regular basis. For production systems a company logo and/or company mission statement might be appropriate. Here are the instructions:

First, in transaction SMW0 (SAP Web Repository), select "Binary data for WebRFC applications. The logo must be in a .gif format. From this transaction, create a new object, then choose to IMPORT. You must then specify the path to the .gif object you have saved, and select the option to TRANSFER.

Then, maintain table SSM_CUST via SM30. Change the field START_IMAGE to the name of the object you created in SMW0.

3) Changing the rippling water on the top right on all is easy but tedious and requires no change to the SAP system. The file name is 'sapalogo.bmp' and resided in the directory "SAPpc/sapgui/themes/default". Looking at this file you can see how it works. Use an editor like Paint and replace each of the SAP ripple images with a morphing image of your own. Make sure the new image is the same size as the original. There are 33 images in the original but you don't need that many. One idea for a morphing image would be to take your company logo and have it build its way across the screen and then off again.

4) Changing the startup movie is even easier. Replace the file 'sapss.avi' with a short avi of your own. This file resides in the same directory as 'sapalogo.bmp'.

Determine optimum DIA WP Number
There are two ways to determine optimum number of WP's (DIA,BTC,UPD..).

1.use AL12 -->statistics-->cursor cache-->all servers You will se the total requests for each WP's.If your DIA WP's all have high request,then you have to add additional DIA WP's.But if you have DIA WP's which have less requests among others,it means you are not using this WP's usually.So you can decrease your WP number to open free space in buffer.
2. use SM50 and dislay CPU Time via CTRL+SHIFT+F6.Here you will see the total CPU time of WP's.With the same logic, if you have WP's whose CPU Time is less than 0:10 then you can remove these WP's via INST_PROFILE.But if all of your WP's CPU Time is greater than 0:50, you have to increase number of WP's.

Locking Security Holes through IMG transactions

Even though you have restricted your users from SU01 or PFCG (to modifiy themselves
or other people) they can get into these areas by the different IMG transaction codes. If
your core team or user community has access to:
OY20 - Authorizations
OY21 - User profiles
OY22 - Create subadministrator
OY24 - Client maintenance
OY25 - CS BC: Set up Client
OY27 - Create Super User
OY28 - Deactivate SAP*
I would suggest locking these transactions in SM01, to prevent a backdoor for people to
assign themselves SAP_ALL or SAP_NEW. I know this is a solution for SAP versions
4.0 thru 4.5B

Saving Passwords for SAP shortcuts

Passwords are not saved in shortcuts created within SAPGUI. In fact, when
you edit a shortcut the password field is grayed out.
Why? Because you need to first register the SAPshortcuts using:

sapshcut -register

SAPSHCUT.exe is located under the SAPpcsapgui directory. In SAPGUI 4.0 it
was called SAPSH.exe.
Once you do the registration you need to open the registry (regedit or
regedt32) and change the value data of "EnablePassword" to "1" under:

HKCU\Software\SAP\SAPShortcut\Security

Then, you will be able to type and save your passwords.

Getting technical info at the OS level

It is very easy to obtain the patch level of some core R/3 executables such
as: disp+work, tp and r3trans.
Many people would like to know how to do this. Here, I will show you how to
do it for R/3 systems running on Windows and SQL Server environments.

1. Go to the command prompt.
2. Change to the "run" directory of your SAP instance (cd
\usr\sap\<SID>\sys\exe\run).

3. Run the following three commands:

dsp+work -V | find "patch number"

tp -V | find "patch number"

r3trans -V | find "patch number"

If you want to see all the release information, then do not filter for the patch number.
Now that you know how to do this, you can get creative and write a little script that reads the names of all your SAP servers from a text file and then it runs the three commands listed above. This way, you can get the patch level of all your systems by just running a script. This becomes in handy when you're consulting or putting reports together.

Controlling the SAPGUI New Visual Design

SAPGUI 4.6x introduced the "new visual design" or "enjoySAP" look and feel.

As you know, users can switch back and forth the new visual design or the "light" look and feel. They simply use the "SAP Configuration" applet in Control Panel. However, you the administrator might need to control what they set up on their PCs in order to have a uniform platform.

The Windows registry controls this setting:

HKEY_LOCAL_MACHINE\Software\SAP\General\Enjoy\Active

By the default, it is set to "On". When the user changes it to the light version using the SAP Configuration icon that is on the desktop or Control Panel, then the registry value changes to "Off".

You can hide the SAP Configuration applet. You can even do this when setting up SAPGUI. You can edit the file SAPSETUP.NID and comment out these two lines:

!InstallFileList('%WINSYSDIR%')
%SAPsourceDir%\sapgui\sapfcpl.cpl
EndProc/U/TS

In SAPGUI 4.6D the line above is number 1,459.

!CreateIconOrLink('SAP Configuration','%WINSYSDIR%\sapfcpl.cpl

','%SAPworkDir%','sapfcpl.cpl,0','Desktop\',' ',cgAsCommon)/TS

In SAPGUI 4.6D the line above is number 1,645.

Locking/Unlocking accounts - Behind the scenes

User accounts can be locked/unlocked via SU01 (User Maintenance.)
But, what goes on behind the scenes? What does the system do to actually set
this?

The table USR02 gets updated. The field UFLAG determines if the user account
is locked or unlocked. The value "64" indicates that the user account is
locked. The value "0" that the user account is unlocked.

Knowing this, you can then issue an update statement at the database level
that locks all users in mass.

Don't lock yourself out, though! Use exceptions for super user accounts in
your update statement.

Notice that 4.6b and above have made improvements to this kind of task,
making the locking/unlocking a bit easier. However, changing at the database
level is much faster and it is just one simple query.

SAP table with Version and Instance name

USAP R/3 stores its version, instance name and OS platform in tables!
This is excellent as you can then query the <SID> database to get the R/3
version, Instance Name and OS platform as follows:

select * from SVERS

select * from TSLE4

You don't even have to log on to the application to get this info. The above
query gives it to you in less than 1 second.

Logging on to SAPNet directly (bypass OSS1)

You can logon to SAPNet -R/3 FrontEnd without using transaction OSS1.
This way you don't have to open an SAP session just to log on to SAPNet.

Here is how to do it:

1. Create the file "saproute.ini" under the %winnt% directory and add the following two entries:

[Router]
sapservX=/H/your-SAProuter-internal-IP-address/H/SAPServX-IP-address/H/

Example:
sapserv4=/H/200.10.10.24/H/204.79.199.2/H/

200.10.10.24 is my SAP router's IP address.
204.79.199.2 is SAPServ4's IP address.

2. Create the file "sapmsg.ini" under the %winnt% directory and add the following two entries:

[Message Server]
O01=oss001.wdf.sap-ag.de

3. Open the SAPLogon program (it is part of the SAP FrontEnd software -SAPGUI, on your PC).

4. Click on the "Groups" button.

5. Click on the down arrow for "SAP Router for" and select your SAPServX from the list.

6. Click on the "Generate list" button.

7. Select "1_PUBLIC" from the list of groups.

8. Click on the "Add and Logon" button.

You're done! You can change the name of the SAPNet session in SAPLogon if you want to.No more typing OSS1!

Check if your SAP servers are alive from the Command Prompt

This is a very useful tip that can help you check if an SAP R/3 server is up and running. This way, you don't have to log on to the system just to find out.
Additionally, you can create another script that uses the FOR command to check ALL your servers so you don't have to check one by one. Have the script do the job for you.

The key to this script is the command SAPINFO.exe, which comes on the SAPFrontEnd CD (SAPGUI). It's part of the SDK. If you don't have the file, e-mail me and I'll send it to you.

The syntax of SAPINFO is:
sapinfo ashost=host sysnr=nn

When used in a batch file (.bat or .cmd) you can check the errorlevel returned by the program. If it is 1 then the system is not up and running.

My script below first checks if the system is on the network by 'pinging' it and expecting a reply.

If you want to check all your systems, then create another script (example: checkallrfcs.bat) and use this command:

FOR /F %%i in (SAPsystems.txt) do call checkrfc %%i 00

The command above reads the file SAPsystems.txt, which should have a list of all the servers (one server name per line) and then it invokes the script 'checkrfc' passing the server name as a parameter. The 00 indicates the instance number.

I believe you will find it extremely useful and it will save you tons of time.
Now, you can just run the script, sit back and watch it report the status of the systems.

Script code:

```
@echo off
rem
rem Script: CheckRFC.BAT
rem It uses SAPINFO from the RFC-SDK (SAPGUI) to check an RFC destination.
rem It needs two parameters: 1. Hostname 2. Instance Number
rem A ping is sent to the host. If successful an RFC check is carried out.

if "%2"=="" goto NoParameter
echo Pinging %1 ...
ping %1 -n 2 | find /i "reply" >nul && goto CheckRFC
echo System does not exist on the network! & goto Bye

:CheckRFC
sapinfo ashost=%1 sysnr=%2 & if errorlevel 1 goto System_Down
echo ---------------------------
```

echo System is up. RFC checks OK!
echo ----------------------------
goto Bye

:System_Down
echo ---------------
echo System is down!
echo ---------------
goto Bye

:NoParameter
echo --
echo You did not specify at least one parameter!
echo Syntax: checkrfc "hostname" "instance number"
echo Example: checkrfc mydev 00
echo --

:Bye

Lock a Client to Prevent Logons

Do you need to do maintenance on a system and want to make sure nobody logs on to it while you're working on it?

You can lock a system at the OS level by running: tp locksys <SID> pf=tpprofile

Example: To lock your DEV system enter this command: tp locksys DEV pf=saptranshost\sapmnt\transbintp_domain_dev.pfl

Users will get this message if they attempt to log on: "Upgrade still running. Logon not possible".

Notice that the message is not exactly accurate. TP locksys is mainly used during release upgrades so the message is kind of generic. But, it works!

To unlock the system, run: tp unlocksys <SID> pf=tpprofile

Now you can tell your boss that you know how to keep the users off the system!

Only SAP* and DDIC can log on to any of the clients in the system that has been locked.