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SDAS 4 RB and Desktop

PC Setup

REVISION HISTORY

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1.0   INTRODUCTION

This manual will describe in step-by-step detail the process involved for setting up a Surface Pro 8 for use in the SDAS 4RB.

These instructions have been separated into different sections to make following along easier. This will ensure that all 4RB's are setup in the same way.

The same instructions will translate across to setting up the PC on the SDAS Desktop however some steps may differ slightly. The differences will not be explained in the first version of this manual.

The terms 'right-click' and 'press and hold' have been used interchangeably in this manual as a way of describing the same function.

2.0 INITIAL SETUP

1- Turn on the unit
2- For language selection, select 'English'
3- Select the Region as 'UK'
4- Select 'UK' as the keyboard
5- Skip setting up a second keyboard
6- Select 'I don't have internet access' – **DO NOT CONNECT TO THE INTERNET** at this stage as this will force you to create a connected Microsoft account on the machine, rather than a local account that we want.
7- Confirm the choice to 'Continue with limited setup'
8- Accept the license agreement
9- The first user account will be named 'Scotia', this will give us Admin access
10- Set the password as '1982'
11- Set the following security questions:
     a. What is the name of the city you were born in?
        Aberdeen
     b. What was your childhood nickname?
        Scotia
     c. What is the name of the city your parents first met?
        Aberdeen
12- Reject and skip the option to use Windows Hello to sign in
13- Select 'No' for the allowing Location tracking
14- Select 'No' for Find My Device
15- Select 'Required only' for sending diagnostic data to Microsoft
16- Select 'No' for sending data to improve inking and typing
17- Select 'No' for tailored experiences
18- Select 'No' for apps to use advertising ID.

3.0   SDAS USER ACCOUNT

A second user account needs to be setup after the initial setup is complete. This will be a standard user and have restricted access to important System files as well as being unable to install extra software.

1- Open the start menu and select the search bar
2- Type 'User'
3- Select 'Add, Edit or Remove other users'. This will take you to the Account settings
4- Go to 'Family and other users'
5- Select 'Add Account'
6- The name of the second account will be 'SDAS'
7- Do not enter a password, just press 'Next'
8- Click on SDAS user
9- In the Account option, press the arrow next to 'Change Account Type' and ensure it is set to 'Standard User'
10- Sign out of the Scotia user and sign in to the SDAS user. It will ask you to setup the new account. Follow steps 13-18 from the previous Section before returning here to do the next step.
11- Restart the machine at this point for any changes made to take effect.

4.0   SERVICE

Log in to the Scotia user again as we will need the admin privileges to add software on to the machines to maintain them.

1- On a computer go to the relevant 'Scotia Products' folder for the SDAS on the Company server and copy the 'Service' folder from inside 'Current Version'
2- Insert a USB memory stick into the computer, paste the Service folder on to it then remove it from the computer
3- Insert the USB into the tablet and copy the service folder to the C:\ drive. Remove the USB from the tablet as it is no longer required.
4- Open the 'Programs' folder from inside the 'Service' folder.
5- Install 'amp_Microsoft_Surface.exe', following the onscreen instructions in the install wizard
6- Install 'SurfaceUEFI_Configurator_xxxxxx', following the onscreen instructions in the install wizard. Uncheck the 'Send Telemetry' option at the start of the wizard
7- Log in to the 'SDAS' account

5.0 WAKE ON POWER

The Surface Pro 8 does support Wake on Power, but the setting must be enabled using a Configurator program. It cannot be changed through the UEFI settings.

1- Click on the start button and search for 'group', select 'Edit group policy' from the results
2- On the left side of the screen, inside 'Computer Configuration', expand 'Administrative Templates'
3- Open 'Windows Components'
4- Scroll down to 'Windows PowerShell' and double click to open
5- Double click on 'Turn on Script Execution', this will open a second window
6- Select 'Enabled' from the 3 button choices at the top left of the window and underneath in the 'Option' section choose 'Allow all scripts'
7- Press 'Apply' followed by 'OK', then close the group policy editor
8- Open File Explorer, go to the Service folder and then go to the 'SEMM' folder
9- Right click on the 'Certificate.ps1' file then select 'Copy as path'
10- Right click the Windows start icon on the taskbar and open 'Terminal (Admin), accept any message about allowing the program to make changes to the machine
11- Type the following into the command into Terminal without the quotes, "**cd C:**". This **c**hanges **d**irectory from the user folder to the C:\ drive
12- Now press Ctrl+V to paste the path copied earlier. Remove the quotes at either end of the command and press the 'Enter' key. This script will create a certificate we need later
13- Close Terminal and go to the C:\ drive, there should now be a new folder called 'Demo Certificate'. Open that folder and confirm there is now a file called 'TempOwner.pfx'
14- Press the 'Start' icon and search for 'UEFI', select Microsoft Surface UEFI Configurator from the results. Accept the warning message about this app making changes to your devices
15- Inside Microsoft Surface UEFI Configurator press 'Start'
16- Select 'Surface Devices' the 'Configuration Package'
17- Press the 'Certificate Protection' option, this will open a file explorer for you to import the certificate created in step 12
18- After selecting the certificate and pressing 'Open' the Configurator will ask you to enter a password. The password is "12345678" without the quotes. Press 'OK'
19- The 'Certificate Protection' option should now have a green tick next to it, press 'Next'
20- Scroll to the right and turn on the 'Pro' column of devices, deselecting all but Surface Pro 8 followed by pressing 'OK'
21- Nothing needs changed on the next screen so press 'Next'
22- Now at the bottom of the 'Boot' column turn on the 'Wake on Power' option and press 'Next'
23- Select 'Windows Installer (MSI)' to build the package. This will open a file explorer for you to set a save location and name. Go to the service folder and select the file

'WakeonPower.msi' then press 'Save'. This will overwrite the file but keep the same naming structure

24- The Configurator will tell you if creating the package was successful and if so, it will give you 2 digits that are unique to this machine and package. Note down these digits as these are required later. Press 'End' and close the Configurator

25- Open the 'Service' folder, right click on the file 'WakeonPower.msi', select 'Copy as path'

26- Right click on the start icon and open Terminal (Admin), press Ctrl+V to paste the path. Remove the quotation marks and press the 'Enter' key

27- Continue through the wizard, accepting any prompts

28- Once the wizard has successfully completed then the Wake on Power function will be enabled. Power off the unit, remove power and then plug power back into the unit. The unit should start

6.0 AUTO LOG IN

We set the tablet to log in to the SDAS user account automatically, that way it will keep the customers logged in as a standard user.

1- Press 'Start' and search for 'regedit'.
2- Open Registry Editor and allow it to make changes to your device
3- Go to the following location using the file tree on the left-hand side

> HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows
> NT\CurrentVersion\PasswordLess\Device

4- Double click on 'DevicePasswordLessBuildVersion' and change the 'Value data' from 2 to 0. Press 'OK'. Close Registry Editor
5- Press 'Start' and type 'netplwiz' followed by pressing the top search result listing
6- Select the username 'SDAS' from the list and uncheck the box above 'Users must enter a username and password to use this computer'. Press 'Apply'
7- On the pop-up box that appears just press 'OK' since no password was set for the account
8- Press 'OK' on the original window and restart the machine. This should then log in to the SDAS account automatically

7.0 POWER OFF MACRO

The Power Off Macro was developed as a necessity for shutting down the complete SDAS unit. The tablet sends a shutdown command to the Venom which in turn shuts down the "logging" portion of the unit while the tablet shuts down itself. The tablet had to be in control because there was no electronic means, controlled by the Venom, of shutting down the tablet.

1- Go to the 'Service' folder
2- At the top of the file explorer window press 'View' > 'Show' > 'Hidden items'. The 'Power Off Macro' folder will appear in the folder list
3- Open the folder
4- Right click on 'Scotia Instrumentation.exe' > 'Show more options' > 'Create shortcut'
5- Rename the newly created shortcut to remove " – Shortcut" from the file name
6- Cut and paste the shortcut into the following location:

C:\Program Data\Microsoft\Windows\Start Menu\Programs\Startup

7- Restart the machine and confirm the Scotia logo is in the System Tray down in the bottom right-hand corner. You may need to press the up arrow if it appears in the overspill menu

8.0   INSTALL PROGRAMS

Remain logged in as the SDAS user during this next process. It will require admin privileges to install the software but some of the programs are only required on the SDAS account.

8.1   AUTOHOTKEY

1- Open the 'Service' folder from the C:\ drive.
2- Open the 'Programs' folder
3- Run 'AutoHotKey_setup.exe'
4- Confirm the choice of an Express Install
5- Once completed close the installer, there is no need to open the program

8.2   CISCO AMP

1- Run 'amp_Microsoft_Surface.exe' from the same folder
2- Continue through the installer
3- When prompted, uncheck the option to create a desktop shortcut
4- When the install is completed, the AMP window will open. At this stage it will display a red cross in its window, but this is because the tablet hasn't been connected to the internet yet

8.3   EXPLORER PATCH

1- Go back in to the 'Service' folder then go to 'Open Shell'
2- Open the 'Installers' folder
3- Run 'ep_setup.exe'. It is likely that running this will cause the screen to go grey. It appears broken but the tablet is still running. If it hasn't caused any display issues, then skip ahead to step 7
4- This can be sorted by opening task manager and running a new task, this will be easier with a keyboard. Plug in an external keyboard and press Ctrl+Shift+Esc
5- Click on 'Run new task'
6- Type 'explorer.exe' into the text box and press 'OK'. This should be the issue sorted
7- Press 'Start' and search for 'Properties (ExplorerPatcher)'. Open this
8- Press 'About' from the menus on the left side of the window
9- Select 'Import settings' near the bottom of the window
10- Navigate to 'C:\Service\Open Shell\Backups' and open the 'ExplorerPatcher' backup file inside the folder
11- Accept the prompt about adding information to the registry. Accept the confirmation display afterwards

8.4   OPEN SHELL

1- Go back in to the 'Installers' folder from step 1 of Section 8.3
2- Run 'OpenShellSetup.exe'
3- On the install wizard confirm all screens
4- Once the install is finished it will load the Open Shell Settings page, press the 'Backup' button down at the bottom right of the window
5- Select 'Load from XML File…'
6- Go to the same backup folder from step 10 of Section 8.3
7- Select the 'Open Shell Menu Settings' file
8- Open Shell has now been setup correctly

9.0   SYSTEM TWEAKS

This next session will provide a list of tweaks that need to be done but may not necessarily provide exact instruction on how to achieve these.

9.1   NETWORK CONNECTIVITY

1- If you are setting up a tablet for use with the 4RB then you will need to connect to the Wi-Fi. Ask a member of computing to set this up for you
2- If you are setting up a PC for the SDAS Desktop, then you will need to connect an ethernet cable between the lab access point and the PC

9.2   UPDATE OS

1- Open the computer Settings
2- On the left select 'Windows Update'
3- Press 'Check for updates' at the top right
4- Continue updating unit as required until no updates remain

9.3   HIDE SYSTEM TRAY ICONS

1- Drag all the System Tray icons on to the up arrow in the System Tray
2- Drag the Scotia logo on to the System Tray. The only icons on the tray will be the notification centre icon, the date/time, and the Scotia logo

9.4   SET DATE/TIME

1- Right click on date/time in the System Tray
2- Select adjust date/time
3- Make sure 'Adjust for daylight saving time automatically' is set to On
4- Press 'Sync now' in the middle of the window

9.5   WINDOWS THEME

1- Right click on the computer desktop, select 'Personalise'
2- Select 'Background' from the submenus
3- Click 'Browse photos' in the middle of the screen
4- Navigate to the 'Wallpaper' folder inside of the 'Service' folder
5- Select the 'Desktop.png' file and press 'Choose picture'
6- Set the desktop image fit as 'Fill'
7- Return to the Personalisation submenu and go to 'Colours'
8- For 'Choose your mode' select 'Custom' from the drop-down menu
9- For 'Choose your default Windows mode' select 'Dark'

9.6   POWER SETTINGS

1- Open the computer Settings
2- Go to the 'Power' submenu
3- Press 'Screen and sleep'
4- Set both options to 'Never' using the drop-down menu
5- If setting up the tablet for the 4RB then set the battery power setting to 'Max performance'

9.7   CHANGE POINTER SIZE

1- Open the computer Settings
2- On the left select 'Bluetooth & devices'
3- Go to the 'Mouse' submenu
4- Click on 'Mouse pointer' near the bottom
5- Adjust the pointer size to size 2

9.8   NOTIFICATIONS

1- Open the computer Settings
2- Go to the 'Notifications' submenu
3- At the top turn 'Notifications' off

9.9   BRIGHTNESS (4RB ONLY)

1- Open the computer Settings
2- Go to the 'Display' submenu
3- Adjust the brightness slider until it is at 100%
4- Turn off auto brightness
5- Turn off help improve…

9.10   DISABLE STARTUP ITEMS

1- From the desktop press Ctrl+Shift+Esc to open Task Manager
2- Select the 'Startup apps' menu from the left side, the icon looks like an analogue gauge display
3- Disable all entries except for Cisco Amp, Open Shell, Scotia Instrumentation and Windows Defender if it is in the app lists

9.11   CREATE LOAD AND SAVE FOLDERS

1- From the desktop right click anywhere on the wallpaper
2- Select 'New' from the list
3- Select 'Folder' from the options that appear
4- Rename the first folder to 'Save'
5- Repeat steps 1-3 and rename the second folder 'Load'

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9.12   LARGE DESKTOP ICONS

The desktop will only have 4 items on it: SDAS shortcut, Recycle Bin, Load and Save folders. Everything else will remain hidden in the standard Windows start menu which we access by pressing Shift+Windows key at the same time.

1- From the desktop right click anywhere on the wallpaper
2- Select 'View' from the list
3- Select 'Large icons' from the options displayed

9.13   CREATE SYSTEM RESTORE POINT

1- Press Shift+Windows key to open the standard Windows Start menu
2- Search for 'Create a restore point' and select the best match result
3- In the window that pops up click on the Local Disk in the available drives
4- Press the 'Configure' button underneath
5- Turn on system protection at the top
6- Press 'Apply' then 'OK' at the bottom
7- Now a new button has appeared in the original window, click 'Create…'
8- Enter the name 'First Setup' in the text box
9- Click 'Create' and allow the restore point to be created