

MobileDemand Surface Pro/Surface Go xCase with Barcode Scanner and/or Magnetic Swipe Reader (MSR) Bundle Testing Guidelines

Applies to the Following MobileDemand xCase Bundle Products:

MobileDemand Surface Pro MSR Bundle MobileDemand Surface Pro Scanner Bundle MobileDemand Surface Pro Scanner/MSR Bundle MobileDemand Surface Go MSR Bundle MobileDemand Surface Go Scanner Bundle MobileDemand Surface Go Scanner/MSR Bundle

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Revision History

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10931	0.10	Initial Release	March 2021



1. Prerequisites

- USB Flash Drive with testing apps/shortcuts:
 - o MobileDemand HID Utility.exe
 - Open Notepad
- Required files can be downloaded from here: <u>https://mdweb.blob.core.windows.net/dist/8378464/USB%20Drive/Testing%20Files.zip</u>
 - \circ $\;$ Download and extract files to root of USB Flash Drive
- USB Keyboard (Preferred) or
 - Microsoft Surface Pro Type Cover (*Requires removal of snap wall to use*)
 - Microsoft Surface Go Type Cover (*Requires removal of snap wall to use*)
- 4-Port USB Type-A Hub (Optional, Recommended)
- Microsoft Surface Dock (*Required for Surface Go with MSR*)

2. Assumptions

- Microsoft Surface Pro/Go tablet is installed in approved MobileDemand xCase with Barcode Scanner, MSR, or both
- Microsoft Surface Pro/Go tablet can be powered on



3.1 Preboot Preparation

1. Plug in the USB keyboard (or 4-Port USB Type-A hub with USB Keyboard connected) to open USB port on back of MobileDemand xCase





- If using a Microsoft Surface Pro/Go Type Cover
- Remove bottom snap rail from xCase by gently lifting each snap rail tab and pulling the snap rail away from the tablet





• Microsoft Surface Pro/Go Type Cover can now connect to bottom of tablet



- 2. For Surface Go with MSR (no barcode reader), Surface Dock must be used to connect to the Surface Go device
 - Connect Surface Dock to power source
 - Plug in USB keyboard to available USB port on Surface Dock
 - Plug in USB flash drive to available USB port on Surface Dock
 - Connect Surface Connect cable (Figure 3-3) to port on right side of Surface Go tablet (Figure 3-4)







Figure 3-4



3.2 Booting the Tablet / Entering Audit Mode

- 1. Power on the Microsoft Surface Pro/Go tablet
- 2. Tablet will boot to the Microsoft Windows Out Of Box Experience (OOBE):

Welcome		
Cc	ontinue in selected language?	
	English (United States)	
	Afrikaans	
	አማር ኛ	
	العربية	
	অসমীয়া	
	azərbaycan	
	Беларуская	
		Yes
ው በ		

Figure 3-5

- 3. At the Continue in selected language screen, press Control + Shift + F3 on the keyboard
- 4. Tablet will reboot into Microsoft's Audit mode:



Figure 3-6

Do not click OK, Cancel, or close the System Preparation Tool Window



3.3 Testing Preparation

- 1. Insert the testing USB Flash drive
 - May need to remove USB Keyboard first and use same USB port for Flash Drive
 - If using 4-Port USB Hub, insert Flash Drive into hub
 - If using Microsoft Type Cover, USB port show in Figure 3-1 should be available
 - If testing Surface Go with MSR only, plug USB Flash Drive into Surface Dock
- 2. Using the touch screen, open Windows Explorer and navigate to USB Flash Drive



Figure 3-7

- Required files can be downloaded from here: <u>https://mdweb.blob.core.windows.net/dist/8378464/USB%20Drive/Testing%20Files.zip</u>
 - Download and extract files to root of USB Flash Drive



3.4 Testing the Barcode Scanner (if applicable)

- 1. Double tap the Open Notepad icon
- 2. Tap in Notepad window to set Notepad windows as active
- 3. Using the Trigger buttons on back of xCase, scan a barcode



Figure 3-8

4. Verify the barcode scanned correctly displays in the Notepad window:



Figure 3-9

5. When correct value is displayed, close Notepad window. Do not save!



3.5 Testing the MSR in Keyboard Mode (if applicable)

- 1. Double tap the Open Notepad icon from USB Flash Drive
- 2. Tap in Notepad window to set Notepad as active
- 3. Using the MSR on the tablet slide any card with a magnetic stripe through the MSR
 - Card can be slid either up or down through the MSR slot
 - Magnetic stripe on card should be facing towards front of tablet



4. Verify that there is card track information displayed in the Notepad window. The data may not make sense, but need to verify the MSR is writing data to Notepad:



Figure 3-11

5. When MSR track data is displayed, close Notepad window. Do not save!



3.6 Testing the MSR in HID Mode (if applicable)

- 1. Double tap the MobileDemand HID Utility icon
- 2. Utility will open and try to detect the MSR Device
- 3. Utility will display that a MSR device is connected if found



Figure 3-12

- 4. If no device is detected, click the orange Detect MSR in Figure 3-12
- 5. Using the MSR on the tablet, slide any card with a magnetic stripe through the MSR
 - Card can be slid either up or down through the MSR slot
 - Magnetic stipe on card should be facing towards front of tablet







6. After card has been swiped, verify there is a new row of hexadecimal data in utility window (shown highlighted in yellow in figure 3-11)

MobileDemand HID Utility	—		Х
HID Data Input:)0-00-00-00	-00-00-00	-00-
Clear	Det	ect MSR	
Device Connected! (Serial No: B62379D)			\$
Figure 3-14			

- 7. When track data is displayed, the MSR in HID mode is functioning correctly
- 8. Tap the "X" to exit the test utility



3.7 Exit Testing / Power Off Tablet

- 1. Tap "X" to close the Windows Explorer USB Flash Drive window (if still open)
- 2. System Preparation Tool windows should be the only application open
- 3. Change Shutdown Options value to Shutdown
 - Do NOT change System Cleanup Action value
 - Do NOT check the Generalize checkbox
- 4. Click OK button

System Preparation Tool 3.14				
System Preparation Tool (Sysprep) prepares the machine for hardware independence and cleanup.				
System Cleanup Action				
Enter System Out-of-Box Experience (OOBE) $$				
Generalize				
Shutdown Option				
Shutdown				
OK Cancel				
Figure 2.1F				

Figure 3-15

- 5. Tablet will shutdown, remove USB Flash Drive or any other connected hardware
- 6. Testing is complete



4. Troubleshooting

• Barcode Scanner not sending data into Notepad

If the barcode scanner is firing and appearing to read the barcode but not sending the data into Notepad, the scanner may be configured in the wrong mode. Try scanning barcode below to put barcode scanner in Keyboard mode and try the test again.



 MSR (Keyboard mode) not sending data into Notepad Barcode reader may be configured as a HID device. Try HID test (Section 3.6). If no data is sent to Notepad or MSR_Test utility, verify that MSR device is present in Windows Device Manager under Human Interface Devices > MagTek SCRA Device:

MagTek SCRA Device

• MSR (HID mode) not sending hexadecimal data into Test utility

Barcode reader may be configured as Keyboard device. Try MSR Keyboard test (Section 3.5). If no data is sent to Notepad or Test utility, verify that MSR device is present in Windows Device Manager under POS HID Magnetic Stripe Reader > Magtek MagneSafe Magnetic Stripe Reader Device:

POS HID Magnetic Stripe Reader
Magtek MagneSafe Magnetic Stripe Reader Device

- MSR Device (HID or Keyboard) not sending data and not present in Device Manager Check the install process of xCase with MSR and verify USB connections are correct
- Barcode Scanner not firing when trigger buttons are pressed Check the install process of xCase with Barcode Scanner and verify USB connections are correct



- System Preparation Tool window in Audit Mode got closed Reboot the Surface device from Start menu. Device will reboot into Audit mode and System Preparation Tool window will be back
- USB Keyboard plugged into USB port on back of xCase not working Try another USB keyboard or different USB device (ex: optical mouse) to determine if USB port is supplying power. If power is not detected, check xCase install process and verify USB connections are correct