

Appendix E - Overall Printer Status Table

The following table defines a suggested relationship between various printer states and the variables hrDeviceStatus, hrPrinterStatus, hrPrinterDetectedErrorState, prtAlertGroup, prtAlertCode, and the various sub-unit status variables (prtInputStatus, prtOutputStatus, prtMarkerStatus, prtMediaPathStatus and prtChannelStatus). This table is the recommended implementation of these variables. It is provided to guide implementers of this MIB and users of the MIB by providing a sample set of states and the variable values that are expected to be produced as result of that state.

This information supplements that provided in Section 2.2.13.2 "Overall Printer Status". This is not an exhaustive list rather it is a guideline. More detailed status, if needed, should be obtained from the alert table and the sub-unit status variables.

Printer State	General Printer Status			prtAlertTable		Sub-unit Status (PrtSubUnitStatusTC)
	hrDevice Status	hrPrinter Status	hrPrinter Detected ErrorState	prtAlertGroup	prtAlertCode	
Normal or idle (no binary alerts)	running (2)	idle (3)	(0x0000)	(no binary alerts)	(no binary alerts)	prtInputStatus (per input tray) prtOutputStatus (per output bin) prtMarkerStatus (per marker) prtMediaPathStatus (per path) prtChannelStatus (per channel)
Printing (no binary alerts)	running (2)	printing (4)	(0x0000)	(no binary alerts)	(no binary alerts)	Availability may be: Idle (0) or Active (4) or Busy (6) depending on subsystem state
Off-line	down (5)	other (1)	offline (0x0200)	generalPrinter (5)	subunitOffline (22)	prtChannelStatus: Availability= Unavailable and OnRequest+ Critical Alerts+ Off-Line (1+16+32)
Standby or Power Saver Mode	running (2)	other (1)	(0x0000)	generalPrinter (5)	subunitPower Saver(23)	prtChannelStatus: Availability= Available and Standby (2)

Initial Power Up (no binary alerts, while warming up, printer not accepting jobs)	down (5)	warmup (5)	offline (0x0200)	(no binary alerts)	(no binary alerts)	all groups are: Availability= Unknown+ Transitioning (5+64)
Warming Up (no binary alerts, printer accepting jobs)	running (2)	warmup (5)	(0x0000)	(no binary alerts)	(no binary alerts)	all groups are: Availability= Standby+ Transitioning (2+64)

Critical Errors: the printer can not print

Jam	down (5)	other (1)	Jammed (0x0400)	appropriate group	jammed(8)	PrtSubUnitStatusTC Availability= Unavailable because broken+Critical Alerts (3+16)
Cover/Door Open (listed in cover table)	down (5)	other (1)	Door Open (0x0800)	cover(6)	coverOpened(3)	prtCoverStatus: coverOpen (3)
Input Tray Missing	down (5)	other (1)	inputTray Missing (0x0080)	input(8)	subunitMissing (9)	prtInputStatus: Availability= Unavailable because broken+Critical Alerts (3+16)
Input Tray Empty	down (5)	other (1)	inputTray Empty(0x0004)	input(8)	subunitEmpty (13)	prtInputStatus: Availability= Unavailable because broken+Critical Alerts (3+16)
Output Tray Missing	down (5)	other (1)	outputTray Missing (0x0040)	output(9)	subunitMissing (9)	prtOutputStatus: Availability= Unavailable because broken+Critical Alerts (3+16)

Output Tray Full	down (5)	other (1)	outputFull (0x0008)	output(9)	subunitFull (15)	prtOutputStatus: Availability= Unavailable because broken+Critical Alerts (3+16)
Marker Supply Missing (i.e., toner missing, ink missing)	down (5)	other (1)	markerSupply Missing (0x0020)	markerSupplies (11)	subunitMissing (9)	prtMarkerStatus: Availability= Unavailable because broken+Critical Alerts (3+16)
Marker Supply Empty (i.e., toner empty, ink missing)	down (5)	other (1)	No Toner (0x1000)	markerSupplies (11)	subunitEmpty (13)	prtMarkerStatus: Availability= Unavailable because broken+Critical Alerts (3+16)

Non-Critical Errors: the printer can still print while condition exists (the warning may be current while printing)

Input Tray Low	warning (3)	idle (3) or printing (4) or warmup (5)	Low Paper (0x8000)	input(8)	subunitAlmost Empty(12)	prtInputStatus: Non-Critical Alerts (8)
Output Tray Almost Full	warning (3)	idle (3) or printing (4) or warmup (5)	outputNear Full(0x0010)	output(9)	subunitAlmost Full(14)	prtOutputStatus: Non-Critical Alerts (8)
Marker Supply Almost Empty (i.e., toner low, ink low)	warning (3)	idle (3) or printing (4) or warmup (5)	Low Toner (0x2000)	markerSupplies (11)	subunitAlmost Empty(12)	prtMarkerStatus: Non-Critical Alerts (8)
Input Tray Missing (when n-1 trays are missing with linking)	warning (3)	idle (3) or printing (4) or warmup (5)	inputTray Missing (0x0080)	input(8)	subunitMissing (9)	prtInputStatus: Non-Critical Alerts (8)
Input Tray Empty (when n-1 trays are empty with linking)	warning (3)	idle (3) or printing (4) or warmup (5)	Low Paper (0x8000)	input(8)	subunitEmpty (13)	prtInputStatus: Non-Critical Alerts (8)

Output Tray Missing (when n-1 trays are missing with linking)	warning (3)	idle (3) or printing (4) or warmup (5)	outputTray Missing (0x0040)	output(9)	subunitMissing (9)	prtOutputStatus: Non-Critical Alerts (8)
Output Tray Full (when n-1 trays are full with linking)	warning (3)	idle (3) or printing (4) or warmup (5)	outputFull (0x0008)	output(9)	subunitFull (15)	prtOutputStatus: Non-Critical Alerts (8)

The definition of PrtSubUnitStatusTC specifies that SubUnitStatus is an integer that is the sum of 5 distinct values/states: Availability, Critical, Non-Critical, On-line and Transitioning. Thus when a non-critical alert or alerts are present the values for Availability, On-Line and Transitioning will be summed with the Non-Critical Alerts (8) value.