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## Sensors for enCloud<sup>™</sup> Management System Rules

E ncore Networks' cloud management system, enCloud<sup>™</sup>, provides management of your connected Encore devices via a web portal. The enCloud management system supports Encore Networks' EN-1000<sup>™</sup>, EN-2000<sup>™</sup>, and EN-4000<sup>™</sup> routers.

Rules can be added by a distributor user or customer user with administrator access at the customer account level. Table A-1 lists the sensors used for enCloud rules.

Note: To use enCloud rules, see *Developing Rules for the enCloud™ Management System*.

In the current release, the scope of a rule is at the customer account level—that is, a rule is developed at the customer account level, and the rule tests its condition on devices within that customer account. Rules that apply to a distributor's entire customer base and rules that apply only to a specific use case cannot be created.

**Note:** Sensor names in Table A-1 are spelled and capitalized as they appear in enCloud, and they are listed here in the order in which they are listed on screen. Values for sensors are those reported by the  $EN^{TM}$  device, unless otherwise indicated.

Sensor	Monitored Activity	Description/Definition	Unit of Measurement	Comment
cell.APN	EN1000 EN2000 EN4000	The cellular access point name (APN) value		
cell.IMEI	EN1000 EN2000 EN4000	The cellular IMEI value		
cell.ip	EN1000 EN2000 EN4000	The IP address that the cellular network has assigned to the device's cellular interface		
cell.MDN	EN1000 EN2000 EN4000	The cellular telephone number (Mobile Directory Number)		

Table A-1. Sensors for enCloud Rules (Sheet 1 of 5)

Sensor	Monitored Activity	Description/Definition	Unit of Measurement	Comment
cell.mode	EN1000 EN2000 EN4000	The cellular mode in use	LTE HSPA EVDO CDMA	
Cell.Monthly Total Data	EN1000 EN2000 EN4000	The total data used by the cellular port, as calculated by enCloud for the current billing cycle	bytes	
cell.operator	EN1000 EN2000 EN4000	The cellular wireless carrier (if known)		
Cell.RSRP	EN1000 EN2000 EN4000	The cellular Reference Signal Received Power (RSRP) reading <b>Note:</b> This sensor applies only to LTE networks.	dBm	
Cell.RSRQ	EN1000 EN2000 EN4000	The cellular Reference Signal Received Quality (RSRQ) reading <b>Note:</b> This sensor applies only to LTE networks.	dB	
cell.rx_bytes	EN1000 EN2000 EN4000	The number of bytes received through the cellular wireless connection since the device's last reboot	bytes	
cell.signal_strength	EN1000 EN2000 EN4000	Signal strength of the primary cellular connection	dBm	
cell.SIM	EN1000 EN2000 EN4000	The cellular SIM ID		
Cell.SNR	EN2000 EN4000	The cellular connection's signal-to- noise ratio	dB	
cell.status	EN1000 EN2000 EN4000	Whether the cellular interface on the EN <sup>™</sup> device is up or down; displayed as a green circle (on line) or red circle (off line)	<ul> <li>(green circle)</li> <li>or</li> <li>(red circle)</li> </ul>	
cell.tx_bytes	EN1000 EN2000 EN4000	The number of bytes transmitted through the cellular wireless connection since the device's last reboot	bytes	
cell.uptime	EN1000 EN2000 EN4000	The uptime of the cellular interface	seconds	
Configuration	EN1000 EN2000 EN4000	The name of the configuration currently used by the device		

## Table A-1. Sensors for enCloud Rules (Sheet 2 of 5)

	Monitored		Unit of	
Sensor	Activity	Description/Definition	Measurement	Comment
DEVICE	User Activity	Indicates whether a user's action has affected a device.	Create Edit Delete Multiple Delete Activate Deactivate	
ERROR_CODE	EN1000 EN2000 EN4000	The code for the last error reported by the device		This is closely related to the <b>Most Recent</b> <b>Error</b> field.
FEED	EN1000 EN2000 EN4000	A programmable message from the device		
GROUP	User Activity	Indicates whether a user's action has affected a group.	Create Edit Delete	
interval	EN1000 EN2000 EN4000	The device's check-in interval—that is, how often the device sends data to the enCloud platform	seconds	
lan.ip	EN1000 EN2000 EN4000	The LAN IP address		
lan.rx_bytes	EN1000 EN2000 EN4000	The number of bytes received through the LAN port since the device's last reboot	bytes	
lan.status	EN1000 EN2000 EN4000	The status of the LAN Port (on line or off line); displayed as a green circle (on line) or red circle (off line)	<ul> <li>(green circle)</li> <li>or</li> <li>(red circle)</li> </ul>	The status is off line only if the port is explicitly disabled by a device task, not if the cable is merely unplugged.
lan.tx_bytes	EN1000 EN2000 EN4000	The number of bytes transmitted through the LAN port since the device's last reboot	bytes	
lan.uptime	EN1000 EN2000 EN4000	The uptime of the LAN port	seconds	
Most recent Error	EN1000 EN2000 EN4000	This field contains a string returned by the EN™ device, describing the last error condition reported by the device.		This is closely related to the <b>Error Code</b> field.

Table A-1. Sensors for enCloud Rules (Sheet 3 of 5)

Sensor	Monitored Activity	Description/Definition	Unit of Measurement	Comment
OFFLINE	EN1000 EN2000 EN4000	Whether the device is on line (green) or off line (red). If a device does not check in at the expected interval (as determined by the interval field), it is off line. The next time it checks in, it will be on line.	<ul> <li>(green circle)</li> <li>or</li> <li>(red circle)</li> </ul>	This condition is either true or false.
PROFILE	User Activity	Indicates whether a user's action has affected a hardware (HW) profile.	Create Edit Delete Multiple Delete	
RULE	User Activity	Indicates whether a user's action has affected a rule.	Create Edit Delete Multiple Delete	
system.firmware	EN1000 EN2000 EN4000	The firmware version present on the EN™ device		
system.mode	EN1000 EN2000 EN4000	The Mode of Operation of the EN™ device	Cell Failover Cell Router Cell Passthrough VRRP Back-Up	
system.model	EN1000 EN2000 EN4000	The hardware (HW) profile	EN1000 EN2000 EN4000	
system.name	EN1000 EN2000 EN4000	The name of the device		
system.online	EN1000 EN2000 EN4000	The interface the EN™ device is using to access the internet	WAN Cell	
system.UID	EN1000 EN2000 EN4000	System UID (the device's LAN MAC address)		
System.uptime	EN1000 EN2000 EN4000	The total reported uptime (time since last reboot) of the EN™ device	seconds	
USE CASE	User Activity	Indicates whether a user's action has affected a use case.	Create Edit Delete	
USER	User Activity	Indicates whether a user's action has affected another user.	Create Edit Delete Multiple Delete Log In	

## Table A-1. Sensors for enCloud Rules (Sheet 4 of 5)

Sensor	Monitored Activity	Description/Definition	Unit of Measurement	Comment
wan.ip	EN1000 EN2000 EN4000	The WAN IP address		
wan.rx_bytes	EN1000 EN2000 EN4000	The number of bytes received through the WAN port since the device's last reboot	bytes	
wan.tx_bytes	EN1000 EN2000 EN4000	The number of bytes transmitted through the WAN port since the device's last reboot	bytes	
wan.status	EN1000 EN2000 EN4000	The status of the WAN Port (on line or off line); displayed as a green circle (on line) or red circle (off line)	<ul> <li>(green circle)</li> <li>or</li> <li>(red circle)</li> </ul>	
wan.uptime	EN1000 EN2000 EN4000	The uptime of the WAN Port	seconds	

Table A-1. Sensors for enCloud Rules (Sheet 5 of 5)