

Server Technology

Server Technology INI Configuration (STIC) V2.21 - File Format (PROx)



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Server Technology INI Configuration (STIC) File Format

Overview

Server Technology INI Configuration (STIC) file format is a proprietary text based configuration format utilized by Server Technology's Cabinet & Power Distribution Units (CDUs & PDUs). It is specifically designed to work with Server Technology's StartUp Stick (SUS), as well as other PDU network interfaces such as HTTPS/HTTP web uploads or SFTP/FTP pushes. The format is simple, yet flexible enough to expand into every aspect of Server Technology's current and future configuration needs.

STIC is based on the informal but well-known initialization (INI) file format. Enhanced flexibility has been added to the format to be more cross-platform friendly. However, certain proprietary rules apply. This document describes the format, section categories, property definitions, and value restrictions for STIC.

StartUp Stick configuration is handled by an I2C exchange over the NIC's primary link port. The PDU constantly checks for a StartUp Stick on the LINK port every few seconds. Once detected, the system performs authentication phase. If the login credentials are valid, the PDU initiates a SUS exchange to determine if a STIC file is available and if so, processes it. Upon completion, the PDU will forward success, partial success, or failure information to be logged on the StartUp Stick and set the appropriate SUS status indicators.

Logging

Logging was initially designed StartUp Stick status reports, and may or may not be relevant depending on the application. Only one Startup Stick log entry is generated per transaction, which includes the NIC serial number, "**SUCCESS**" or "**FAILURE**", and a small status description. If an error or unknown property is detected, a STIC line number and current STIC protocol version number will also be included in the message for later analysis.

If a STIC file is considered good enough to write, the PDU system log will show all potentially valid properties that were not present along with the line number.

Format

; this is a comment... you can also use #
[Server Technology INI Configuration]

[section]

<property>: <value>

<property> =<value>

<property> : "<value>"

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General Rules

- STIC is a text file format that is examined per line and terminated by a linefeed (LF) character or carriage return / linefeed (CRLF) combo. Each line cannot be longer than 511 characters. The file name must have an “.INI” extension to be recognized by the PDU or StartUp Stick tool. Other file size and name length limits may apply depending on use.
- Any line that begins with a ‘;’ or ‘#’ comment will be ignored. Preceding spaces, tabs, and non-printable characters, including blank lines, will also be ignored. Post-value white space and control characters are also ignored.
- Configuration categories are defined by section headers. These are case-insensitive and must be enclosed in [.....] brackets. Section headers may use ‘.’ separators between labels to specify special indexing or hierarchy depending on the defined category. All sections are optional except the first case-insensitive section header which, must be [\[Server Technology INI Configuration\]](#).
- Configuration properties are defined by a case-insensitive label followed by a ‘:’ or ‘=’ separator. Spaces and tabs surrounding the separator are ignored. Property labels are optional and may contain spaces.
- Configuration values are optional and follow the configuration property separator. Values may contain spaces, and are generally case insensitive unless the defined property requires it.
- Configuration values may be encapsulated within ”double quotes” when the value requires preceding spaces, trailing spaces, or the value includes double quotes. Both double quotes and backslash must be escape encoded as \\ and \” when encapsulated between double quotes.
- Special repetitive properties are defined in certain sections to accommodate values that might not fit on a single line (such as banners and lists). In these cases, if any cumulative buffer or line limit is exceeded, the property changes will not be honored. These properties will be specifically defined in a section if they apply.

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Security

Legal restrictions require Server Technology to enforce certain data access restrictions when a new / factory reset PDU is provided to a customer with a default administrator and password. In this mode, STIC downloads are disabled and uploads are honored only if the default administrator or password changes. Once this occurs, the system will allow normal STIC R/W access.

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Key: **Blue** = New additions, **DEP** = Deprecated section or property, **SRP** = special repetitive property, **WO** = Write-only

Section Property/Value Summary

[Section] / Property	Type/Value	Min	Max	R Ver	W Ver
[Server Technology INI Configuration]	<string> (REQUIRED)	---	---	2.00	2.00
nic serial number:	<integer>	1 (0)	10 (2 ³² -1)	2.00	2.00
restart	auto no yes	fixed	fixed	2.12	2.12
[access]	<string>	---	---	2.10	2.10
access method:	ldap only ldap then local local only radius only radius then local tacacs only tacacs then local	fixed	fixed	2.10	2.10
...					
configuration reset button:	disabled enabled	fixed	fixed	2.10	2.10
default log order:	newest first oldest first	fixed	fixed	2.11	2.11
local administrator account:	optional required	fixed	fixed	2.11	2.11
startup stick:	disabled enabled	fixed	fixed	2.10	2.10
strong passwords:	disabled enabled	fixed	fixed	2.10	2.10
[adc sensor]	<string>	---	---	2.11	2.10
id:	<adc id string>	2	2	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
thresholds:	<csv threshold list>	7 (0,0,0,0)	15 (255,255,255,255)	2.11	2.11
[adc sensor global]	<string>	---	---	2.11	2.11
hysteresis:	<integer>	1 (1)	2 (20 counts)	2.11	2.11
[banner]	<string>	---	---	2.10	2.10
line:	(SRP) <string>	0	line limit (2070 total)	2.10	2.10
action:	modify	fixed	fixed	2.10	2.10
[bluetooth]:	(DEP) <string>	---	---	2.10-20	2.10-20
discoverability:	(DEP) disabled enabled limited	fixed	fixed	2.10-20	2.10-20
feature:	(DEP) disabled enabled	fixed	fixed	2.10-20	2.10-20
name:	(DEP) <string>	1	31	2.10-20	2.10-20
pin:	(DEP) <integer>	1 (0)	4 (9999)	2.10-20	2.10-20
transmission power:	(DEP) <integer>	1 (4)	2 (-6 dbm)	2.10-20	2.10-20
[branch]	<string>	---	---	2.11	2.11
id:	<branch id string>	3	4	2.11	2.11
current thresholds:	<csv threshold list>	7 (0,0,0,0)	? (max branch A)	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
[branch global]	<string>	---	---	2.11	2.11
current hysteresis:	<float>	1 (0)	4 (10.0 A)	2.11	2.11

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<u>[Section] / Property</u>	<u>Type/Value</u>	<u>Min</u>	<u>Max</u>	<u>R Ver</u>	<u>W Ver+</u>
[cli]	<string>	---	---	2.00	2.00
custom prompt:	<string>	0	32	2.10	2.10
session timeout:	<integer>	1 (1)	4 (1440 minutes)	2.10	2.10
ssh:	disabled enabled	fixed	fixed	2.00	2.00
ssh port:	<integer>	1 (1)	5 (65535)	2.00	2.00
ssh authentication method:	keyboard and password	fixed	fixed	2.00	2.00
...	keyboard only password only				
telnet:	disabled enabled	fixed	fixed	2.00	2.00
telnet port:	<integer>	1 (1)	5 (65535)	2.00	2.00
[contact sensor]	<string>	---	---	2.11	2.10
id:	<contact sensor id string>	2	2	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
[cord]	<string>	---	---	2.11	2.10
id:	<cord id string>	2	2	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
3-phase out-of-balance thresholds:	<csv threshold list>	3 (0,0)	7 (200,200)	2.11	2.11
apparent power thresholds:	<csv threshold list>	7 (0,0,0,0)	? (max cord VA)	2.11	2.11
current capacity:	<integer>	1 (1)	3 (max cord A)	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
nominal power factor:	<float>	1 (0)	4 (1.00)	2.11	2.11
nominal voltage:	<integer>	3 (min cord V)	3 (max cord V)	2.11	2.11
power factor thresholds:	<csv threshold list>	3 (0,0)	9 (1.00,1.00)	2.11	2.11
power thresholds:	<csv threshold list>	7 (0,0,0,0)	? (max cord W)	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
[cord global]	<string>	---	---	2.11	2.11
3-phase out-of-balance hysteresis:	<integer>	1 (0)	4 (200 %)	2.11	2.11
apparent power hysteresis:	<integer>	1 (0)	4 (1000 VA)	2.11	2.11
power factor hysteresis:	<float>	1 (0)	4 (1.00)	2.11	2.11
power hysteresis:	<integer>	1 (0)	4 (1000 W)	2.11	2.11
[data trending]	<string>	---	---	2.11	2.11
feature:	disabled enabled	fixed	fixed	2.11	2.11
[email]	<string>	---	---	2.00	2.00
from address:	<string, no space>	0	48	2.00	2.00
log authentication messages:	disabled enabled	fixed	fixed	2.00	2.00
log configuration messages:	disabled enabled	fixed	fixed	2.00	2.00
log event messages:	disabled enabled	fixed	fixed	2.00	2.00
log power messages:	disabled enabled	fixed	fixed	2.00	2.00
notifications:	disabled enabled	fixed	fixed	2.00	2.00
primary to address:	<string, no space>	0	48	2.00	2.00
secondary to address:	<string, no space>	0	48	2.00	2.00
smtp authentication method:	any cram-md5 digest-md5	fixed	fixed	2.00	2.00
...	login plain none				
smtp authenticate with:	from address username	fixed	fixed	2.00	2.00
smtp host:	<string, no space>	0	63	2.00	2.00
smtp password:	<string>	0	32	---	2.00
smtp password secure:	<hex>	0 or	64	2.00	2.00
smtp port:	<integer>	1 (1)	5 (65535)	2.00	2.00
smtp username:	<string, no space>	0	32	2.00	2.00
subject id:	location system id	fixed	fixed	2.00	2.00
trend file attachments:	disabled enabled	fixed	fixed	2.11	2.11

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<u>[Section] / Property</u>	<u>Type/Value</u>	<u>Min</u>	<u>Max</u>	<u>R Ver</u>	<u>W Ver+</u>
[fan sensor]	<string>	---	---	2.13	2.13
id:	<fan sensor id string>	2	2	2.13	2.13
name:	<string, no space>	0	32	2.13	2.13
email notifications:	disabled enabled	fixed	fixed	2.13	2.13
snmp trap notifications:	disabled enabled	fixed	fixed	2.13	2.13
thresholds:	<csv threshold list>	7 (0,0,0,0)	23 (15300 RPM)	2.13	2.13
[fan sensor global]	<string>	---	---	2.13	2.13
hysteresis:	<integer>	1 (0)	4 (1200 RPM)	2.13	2.13
[ftp]	<string>	---	---	2.00	2.00
client automatic updates:	disabled enabled	fixed	fixed	2.00	2.00
client update directory:	<string>	0	64	2.00	2.00
client update filename:	<string>	0	32	2.00	2.00
client update host:	<string, no space>	0	63	2.00	2.00
client update password:	<string>	0	32	---	2.00
client update password secure: (WO)	<hex>	0 or	64	2.00	2.00
client update scheduled day:	sunday monday tuesday wednesday thursday friday saturday everyday	fixed	fixed	2.00	2.00
...					
client update scheduled hour:	12 am 1 am 2 am 3am 4 am 6 am 7 am 8 am 9 am 10 am 11 am 12 pm 1 pm 2 pm 3 pm 4 pm 5 pm 6 pm 7 pm 8 pm 9 pm 10 pm 11 pm	fixed	fixed	2.00	2.00
...					
client update username:	<string>	0	32	2.00	2.00
server:	disabled enabled	fixed	fixed	2.00	2.00
[group]	<string>	---	---	2.11	2.10
name:	<string, no space>	1	32	2.11	2.10
outlet access list:	<csv outlet id list>	0	line limit	2.11	2.10
action:	modify create delete update	fixed	fixed	2.11	2.10
[humidity sensor]	<string>	---	---	2.11	2.10
id:	<humidity sensor id string>	2	2	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
thresholds:	<csv threshold list>	7 (0,0,0,0)	15 (100,100,100,100)	2.11	2.11
[humidity sensor global]	<string>	---	---	2.11	2.11
hysteresis:	<integer>	1 (0)	2 (20 %RH)	2.11	2.11
[ldap]	<string>	---	---	2.10	2.10
bind type:	md5 simple tls	fixed	fixed	2.10	2.10
group membership attribute:	<string>	0	30	2.10	2.10
group search:	disabled enabled	fixed	fixed	2.10	2.10
group search base distinguished name:	<string>	0	100	2.10	2.10
port:	<integer>	1 (1)	5 (65535)	2.10	2.10
primary host:	<string, no space>	0	63	2.10	2.10
search bind distinguished name:	<string>	0	124	2.10	2.10
search bind password:	<string>	0	32 (V2.15)	---	2.10
search bind password secure: (WO)	<hex>	0 or	64	2.10	2.10
secondary host:	<string, no space>	0	63	2.10	2.10
user membership attribute:	<string>	0	61	2.10	2.10
user search base distinguished name:	<string>	0	100	2.10	2.10
user search filter:	<string>	0	100	2.10	2.10

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[Section] / Property	Type/Value	Min	Max	R Ver	W Ver+
[line]	<string>	---	---	2.11	2.11
id:	<line id string>	3	3	2.11	2.11
current thresholds:	<csv threshold list>	7 (0,0,0,0)	? (max line A)	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
[line global]	<string>	---	---	2.11	2.11
current hysteresis:	<float>	1 (0)	4 (10.0 A)	2.11	2.11
[lldp]	<string>	---	---	2.17	2.17
feature:	disabled enabled	fixed	fixed	2.17	2.17
transmit interval:	<integer>	1 (5)	5 (32768 seconds)	2.17	2.17
[network]	<string>	---	---	2.00	2.00
dhcp:	disabled enabled	fixed	fixed	2.00	2.00
dhcp boot delay:	disabled enabled	fixed	fixed	2.00	2.00
dhcp fqdn:	disabled enabled	fixed	fixed	2.00	2.00
dhcp fqdn name:	<string, no space>	0	63	2.00	2.00
dhcp static address fallback:	disabled enabled	fixed	fixed	2.00	2.00
network mode:	disabled dual ipv6/ipv4 ipv4 only ipv6 only	fixed	fixed	2.00	2.00
static ipv4 address:	<ipv4 string>	7	15	2.00	2.00
static ipv4 subnet mask:	<ipv4 string>	7	15	2.00	2.00
static ipv4 gateway:	<ipv4 string>	7	15	2.00	2.00
static ipv6 address:	<ipv6 string>	2	45	2.00	2.00
static ipv6 gateway:	<ipv6 string>	2	45	2.00	2.00
static ipv6 prefix:	<cidr string>	1 (/0)	4 (/128)	2.00	2.00
static primary dns:	<ipv4 / ipv6 string>	2	45	2.00	2.00
static secondary dns:	<ipv4 / ipv6 string>	2	45	2.00	2.00
zero touch provisioning	disabled enabled	fixed	fixed	2.12	2.12
[outlet]	<string>	---	---	2.11	2.10
id:	<outlet id string>	3	5	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
control lock:	disabled enabled	fixed	fixed	2.11	2.11
current thresholds:	<csv threshold list>	7 (0,0,0,0)	? (max outlet A)	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
extra on delay:	<integer>	1 (0)	3 (900 seconds)	2.11	2.11
host:	<string, no space>	0	63	2.11	2.11
power factor thresholds:	<csv threshold list>	3 (0,0)	9 (1.00,1.00)	2.11	2.11
power thresholds:	<csv threshold list>	7 (0,0,0,0)	? (max outlet W)	2.11	2.11
script feature:	disabled enabled	fixed	fixed	2.11	2.11
script delay:	<integer>	1 (1)	2 (15 minutes)	2.11	2.11
shutdown feature:	disabled enabled	fixed	fixed	2.11	2.11
shutdown delay:	<integer>	2 (30)	3 (900 seconds)	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
socket adapter:	none C13 C19	fixed	fixed	2.16	2.16
wakeup state:	last off on	fixed	fixed	2.11	2.11
[outlet global]	<string>	---	---	2.11	2.11
change logging:	disabled enabled	fixed	fixed	2.11	2.11
current hysteresis:	<float>	1 (0)	4 (10.0 A)	2.11	2.11
power factor hysteresis:	<float>	1 (0)	4 (1.00)	2.11	2.11
power hysteresis:	<integer>	1 (0)	4 (1000 W)	2.11	2.11
reboot delay:	<integer>	1 (5)	3 (600 seconds)	2.11	2.11
sequence interval:	<integer>	1 (0)	2 (15 seconds)	2.11	2.11

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[Section] / Property	Type/Value	Min	Max	R Ver	W Ver+
[over current protector]	[<string>]	---	---	2.11	2.11
id:	<ocp id string>	3	4	2.11	2.11
current capacity:	<integer>	1 (1)	3 (max OCP A)	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
[phase]	[<string>]	---	---	2.11	2.11
id:	<phase id string>	3	3	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
power factor thresholds:	<csv threshold list>	3 (0,0)	9 (1.00,1.00)	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
voltage thresholds:	<csv threshold list>	7 (min phase V)	? (max phase V)	2.11	2.11
[phase global]	[<string>]	---	---	2.11	2.11
power factor hysteresis:	<float>	1 (0)	4 (1.00)	2.11	2.11
voltage hysteresis:	<float>	1 (0)	4 (20.0 V)	2.11	2.11
[port]	[<string>]	---	---	2.11	2.11
id:	<port id string>	4	4	2.11	2.11
baud:	1200 2400 4800 9600 19200 38400 57600 115200	fixed	fixed	2.11	2.11
...					
dsr check:	disabled enabled	fixed	fixed	2.11	2.11
remote connection timeout:	<integer>	1 (0)	5 (60 minutes)	2.11	2.11
rftag support	disabled enabled	fixed	fixed	2.13	2.13
[radius]	[<string>]	---	---	2.10	2.10
primary server:	<string, no space>	0	63	2.10	2.10
primary server port:	<integer>	1 (1)	5 (65535)	2.10	2.10
primary server retries:	<integer>	1 (0)	2 (10)	2.10	2.10
primary server shared secret: (WO)	<string>	0	48	---	2.10
primary server shared secret secure:	<hex>	0 or	96	2.10	2.10
primary server timeout:	<integer>	1 (1)	2 (30 seconds)	2.10	2.10
secondary server:	<string, no space>	0	63	2.10	2.10
secondary server port:	<integer>	1 (1)	5 (65535)	2.10	2.10
secondary server retries:	<integer>	1 (0)	2 (10)	2.10	2.10
secondary server shared secret: (WO)	<string>	0	48	---	2.10
secondary server shared secret secure:	<hex>	0 or	96	2.10	2.10
secondary server timeout:	<integer>	1 (1)	2 (30 seconds)	2.10	2.10

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[Section] / Property	Type/Value	Min	Max	R Ver	W Ver+
[snmp]	<string>	---	---	2.00	2.00
get community:	<string>	0	32	2.00	2.00
ip restrictions:	none trap destinations only	fixed	fixed	2.00	2.00
set community:	<string>	0	32	2.00	2.00
system contact:	<string>	0	63	2.00	2.00
system name:	<string>	0	63	2.00	2.00
trap community:	<string>	0	32	2.00	2.00
trap destination primary host:	<string, no space>	0	63	2.00	2.00
trap destination secondary host:	<string, no space>	0	63	2.00	2.00
trap error repeat time:	<integer> (seconds)	1 (1)	5 (65535)	2.00	2.00
trap format:	v1 v2c v3	fixed	fixed	2.00	2.00
v2:	disabled enabled	fixed	fixed	2.00	2.00
v3:	disabled enabled	fixed	fixed	2.00	2.00
v3 read-only user auth method: (DEP)	md5 md5 with des none	fixed	fixed	2.10-13	2.10-13
v3 read-only user auth password: (DEP)	<string>	0	39	2.10-13	2.10-13
v3 read-only user auth password secure: (DEP)	<hex>	0 or	96	2.10-13	2.10-13
v3 read-only user privacy password: (DEP)	<string>	0	31	2.10-13	2.10-13
v3 read-only user privacy password secure: (DEP)	<hex>	0 or	64	2.10-13	2.10-13
v3 read-only username: (DEP)	<string>	0	31	2.10-13	2.10-13
v3 read-write user auth method: (DEP)	md5 md5 with des none	fixed	fixed	2.10-13	2.10-13
v3 read-write user auth password: (DEP)	<string>	0	39	2.10-13	2.10-13
v3 read-write user auth password secure: (DEP)	<hex>	0 or	96	2.10-13	2.10-13
v3 read-write user privacy password: (DEP)	<string>	0	31	2.10-13	2.10-13
v3 read-write user privacy password secure: (DEP)	<hex>	0 or	64	2.10-13	2.10-13
v3 read-write username: (DEP)	<string>	0	31	2.10-13	2.10-13
v3 trap username:	<string>	0	31	2.00	2.00
[snmpv3 user]	<string>	---	---	2.14	2.14
name:	<string>	0	31	2.14	2.14
access:	disabled enabled	fixed	fixed	2.14	2.14
auth method:	none md5 md5 with des md5 with aes sha sha with des sha with aes	fixed	fixed	2.14	2.14
auth password: (WO)	<string>	0	39	2.14	2.14
auth password secure: (WO)	<hex>	0 or	96	2.14	2.14
privacy password: (WO)	<string>	0	3115	2.14	2.14
privacy password secure: (WO)	<hex>	0 or	64	2.14	2.14
action:	create delete modify update	fixed	fixed	2.14	2.14
[sntp]	<string>	---	---	2.00	2.00
dst:	disabled enabled	fixed	fixed	2.00	2.00
dst end time zone string:	<time zone string>	11	15	2.00	2.00
dst start time zone string:	<time zone string>	11	15	2.00	2.00
local gmt offset:	<gmt offset string>	1 (-12:59)	6 (+14:59)	2.00	2.00
primary host:	<string, no space>	0	63	2.00	2.00
secondary host:	<string, no space>	0	63	2.00	2.00
[syslog]	<string>	---	---	2.00	2.00
debug messaging:	disabled enabled	fixed	fixed	2.11	2.11
protocol:	fqdn system name	fixed	fixed	2.18	2.18
port:	<integer>	1 (1)	5 (65535)	2.00	2.00
primary host:	<string, no space>	0	63	2.00	2.00
protocol:	rfc3164 rfc5424	fixed	fixed	2.10	2.10
secondary host:	<string, no space>	0	63	2.00	2.00
[system]	<string>	---	---	2.00	2.00
location:	<string>	0	63	2.00	2.00
		0	80	2.20	2.20

Server Technology INI Configuration (STIC) File Format

[Section] / Property	Type/Value	Min	Max	R Ver	W Ver+
[tacacs]	<string>	---	---	2.10	2.10
key:	(WO) <string>	0	60	---	2.10
key secure:	<hex>	0 or	128	2.10	2.10
port:	<integer>	1 (1)	5 (65535)	2.10	2.10
primary host:	<string, no space>	0	63	2.10	2.10
secondary host:	<string, no space>	0	63	2.10	2.10
[temperature sensor]	<string>	---	---	2.11	2.10
id:	<temperature sensor id string>	2	2	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
thresholds celsius:	<csv threshold list>	7 (min temp C)	? (max temp C)	2.11	2.11
thresholds fahrenheit:	<csv threshold list>	7 (min temp F)	? (max temp F)	2.11	2.11
[temperature sensor global]	<string>	---	---	2.11	2.11
hysteresis celsius:	<integer>	1 (0)	4 (30 °C)	2.11	2.11
hysteresis fahrenheit:	<integer>	1 (0)	4 (54 °F)	2.11	2.11
scale:	celsius fahrenheit	fixed	fixed	2.11	2.11
[unit]	<string>	---	---	2.11	2.10
id:	<unit id string>	1	1	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
asset tag:	<string>	0	32	2.11	2.11
display orientation:	auto inverted normal	fixed	fixed	2.11	2.11
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
outlet display order:	normal reversed	fixes	fixes	2.13	2.13
outlet sequence:	normal reversed	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11
[user]	<string>	---	---	2.11	2.00
ldap group name:	<string, no space>	1	32	2.11	2.10
tacacs privilege level:	<integer>	1 (0)	2 (15)	2.11	2.10
username:	<string, no space>	1	32	2.11	2.00
access level:	admin on only power user reboot only user view only	fixed	fixed	2.11	2.10
...					
group access list:	<csv list, no space>	0	line limit	2.11	2.10
outlet access list:	<csv outlet id list>	0	line limit	2.11	2.10
password:	(WO) <string>	1	32	---	2.00
password secure:	<hex>	64	64	2.11	2.00
remote port access list:	<csv port id list>	0	line limit	2.11	2.10
system monitor access:	disabled enabled	fixed	fixed	2.11	2.10
action:	modify	fixed	fixed	2.11	2.00
...	create delete update	fixed	fixed	2.11	2.10
[water sensor]	<string>	---	---	2.11	2.10
id:	<water sensor id string>	1	1	2.11	2.10
name:	<string, no space>	0	32	2.11	2.10
email notifications:	disabled enabled	fixed	fixed	2.11	2.11
snmp trap notifications:	disabled enabled	fixed	fixed	2.11	2.11

Server Technology INI Configuration (STIC) File Format

<u>[Section] / Property</u>	<u>Type/Value</u>	<u>Min</u>	<u>Max</u>	<u>R Ver</u>	<u>W Ver+</u>
[web]	[<string>]	---	---	2.00	2.00
ca certificate:	disabled enabled	fixed	fixed	2.20	2.20
http:	disabled enabled	fixed	fixed	2.00	2.00
http port:	<integer>	1 (1)	5 (65535)	2.00	2.00
https:	disabled enabled	fixed	fixed	2.00	2.00
https port:	<integer>	1 (1)	5 (65535)	2.00	2.00
log entries per page:	<integer>	2 (10)	3 (250)	2.11	2.11
server certificate:	disabled enabled	fixed	fixed	2.20	2.20
server certificate passphrase: (WO)	<string>	0	64	2.20	2.20
server certificate passphrase secure:	<hex>	128	128	2.20	2.20
session timeout:	<integer>	1 (1)	4 (1440 minutes)	2.10	2.10
spm password reset: (DEP)	yes no	fixed	fixed	---	2.10-20
spm secure access: (DEP)	disabled enabled	fixed	fixed	2.10-20	2.10-20
json api web service	disabled enabled	fixed	fixed	2.16	2.16
[wlan]	[<string>]	---	---	2.10	2.10
bssid:	<MAC string>	0 or	17	2.10	2.10
feature:	disabled enabled	fixed	fixed	2.10	2.10
key: (WO)	<string>	0	63	---	2.10
key secure:	<hex>	0 or	128	2.10	2.10
security:	open wep open key wep shared key	fixed	fixed	2.10	2.10
...	wpa-psk aes wpa-psk tkip				
...	wpa-psk tkip+aes wpa2-psk aes				
...	wpa2-psk tkip wpa2-psk tkip+aes				
ssid:	<string>	0	31	2.10	2.10
[ztp]	[<string>]	---	---	2.12	2.12
automatic updates:	disabled enabled	fixed	fixed	2.13	2.13
state reset:	yes no	fixed	fixed	2.12	2.12
update scheduled day:	sunday monday tuesday	fixed	fixed	2.13	2.13
...	wednesday thursday friday				
...	saturday everyday				
update scheduled hour:	12 am 1 am 2 am 3am 4 am	fixed	fixed	2.13	2.13
...	6 am 7 am 8 am 9 am 10 am				
...	11 am 12 pm 1 pm 2 pm 3 pm				
...	4 pm 5 pm 6 pm 7 pm 8 pm				
...	9 pm 10 pm 11 pm				

Section and Property/Value Definitions

Most sections are optional, repeatable, and may occur in any order, unless otherwise stated. If duplicate sections are repeated, the last of any duplicate properties will be honored. Section names, property names, and values are case insensitive, unless otherwise specified. Literal values are specified in bold. Special values are indicated in <> carats and are described in more detail per definition. All strings are defined as printable ASCII unless otherwise noted

[Server Technology INI Configuration]

V2.00

This **Mandatory** section defines system identification and action requests and **MUST** be the first section in the file. If specific identification information is provided, and it does not match the NIC card, then the STIC file will be ignored. If no identification information is provided, then the entire STIC file is honored as a template, including system specific settings. It is the intention of this protocol that specific sections not be included in template based configuration. This section also defines post-action behavior, such as restart upon completion.

nic serial number:

<integer, 0 to 4294967295>

V2.00

This property is used to determine if the STIC file is intended to be used on a specific NIC card. If this value does not match the NIC card serial number, then this file will be rejected. If this property is blank or unspecified, the STIC file is considered a template, and all relevant settings will be applied.

restart:

auto

V2.12

no

V2.12

yes

V2.12

This property determines how STIC interfaces (i.e. WEB, FTP, SUS) should handle restarts when a STIC file has been processed. If “yes” is specified, the interface will restart regardless of whether the NIC card requires it. If “no” is specified, the interface will not restart even if the NIC card requires it. The default setting is “auto” which means the interface chooses what restart action should be taken. Below is a list of automatic restart behaviors for each STIC interface:

<i>Interface</i>	<i>Automatic restart behavior</i>
SFTP	Automatically restarts on exit if NIC card requires it
FTP	Automatically restarts on exit if NIC card requires it
HTTPS	Does not restart, but displays restart required if needed
HTTP	Does not restart, but displays restart required if needed
SUS	Automatically restarts on completion if NIC card requires it

Server Technology INI Configuration (STIC) File Format

[access] V2.10

This section defines user access settings for the PDU.

access method:	ldap only	V2.10
	ldap then local	V2.10
	local only	V2.10
	radius then local	V2.10
	radius only	V2.10
	tacacs then local	V2.10
	tacacs only	V2.10

This property sets the desired system access method.

configuration reset button:	disabled	V2.10
	enabled	V2.10

This property enables or disables access to the configuration reset button. Setting this to disabled forces **local administrator account** to be required. If there are no local administrators accounts present then this is forced to enabled to allow system recovery.

default log order:	newest first	V2.11
	oldest first	V2.11

This property enables or disables access to the configuration reset button.

local administrator account:	optional	V2.11
	required	V2.11

This property removes the restriction to delete the last local admin when set to optional. Setting this to optional forces **configuration reset button** to be enabled to allow system recovery.

startup stick:	disabled	V2.10
	enabled	V2.10

This property enables or disables Start Up Stick access.

strong passwords:	disabled	V2.10
	enabled	V2.10

This property enables or disables strong password requirements.

Server Technology INI Configuration (STIC) File Format

[adc sensor] V2.10

This section defines specific ADC sensor settings for the PDU. This section is readable only if ADC sensors are present.

id: **<adc sensor id string [2]>** V2.10

This property sets the current ADC sensor object to perform operations on and remains persistent within a section. The value is a valid 2 character ADC sensor ID in the form of <unit id><sensor number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name: **<string, no space [0..32]>** V2.10

This property sets the name of the currently selected ADC sensor in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate ADC sensor name or a reserved ADC sensor ID. The value may be blank.

email notifications: **disabled** V2.11
enabled V2.11

This property enables or disables email notifications for the currently selected ADC sensor in the section.

snmp trap notifications: **disabled** V2.11
enabled V2.11

This property enables or disables SNMP trap notifications for the currently selected ADC sensor in the section.

thresholds: **<csv threshold list>** V2.11

This property sets the threshold list for the currently selected ADC sensor. The value is a comma separated ADC threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer level that ranges from 0 to 255. Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms.

[adc sensor global] V2.11

This section defines global ADC sensor settings for the PDU. This section is readable only if ADC sensors are present.

hysteresis: **<integer, 0 to 20>** V2.11

Server Technology INI Configuration (STIC) File Format

This property sets the global ADC sensor hysteresis. The value is an integer that ranges from 0 to 20 (counts).

[banner] V2.10

This section defines the PDU login banner.

line: <string, > V2.10

This **special repetitive** property appends line data to the current banner. The value is a string up to the maximum STIC line length and may require encapsulated quotes. A CRLF is inserted between each repeated line property. The cumulative stored character total for a banner must not exceed 2070 characters.

action: **modify** V2.10

This property saves the currently defined banner in the section. The banner will be set to blank if no line was specified prior to the action command. After the action has occurred, the currently defined banner in the section will be reset.

- **modify** – make changes to the current banner.

This property sets the Bluetooth module pin. The value is an integer that ranges from 0000 to 9999.

[branch] V2.11

This section defines specific branch settings for the PDU. This section is readable only if branches are present.

id: <branch id string [3..4]> V2.11

This property sets the current branch object to perform operations on and remains persistent within a section. The value is a valid 3 to 4 character branch ID in the form of <unit id><cord id><branch number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

current thresholds: <csv threshold list> V2.11

Server Technology INI Configuration (STIC) File Format

ssh:	disabled	V2.00
	enabled	V2.00

This property enables or disables Secure Shell (SSH). A change to this property requires a restart.

ssh authentication method:	keyboard and password	V2.00
	keyboard only	V2.00
	password only	V2.00

This property sets the desired SSH authentication method.

ssh port:	<integer, 1 to 65535>	V2.00
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This property sets the SSH port. The value is an integer that ranges from 1 to 65535. A change to this property requires a restart if SSH is enabled.

telnet:	disabled	V2.00
	enabled	V2.00

This property enables or disables Telnet. A change to this property requires a restart.

telnet port:	<integer, 1 to 65535>	V2.00
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This property sets the Telnet port. The value is an integer that ranges from 1 to 65535. A change to this property requires a restart if Telnet is enabled.

[contact sensor]		V2.10
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This section defines specific contact sensor settings for the PDU. This section is readable only if contact sensors are present.

id:	<contact sensor id string [2]>	V2.10
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This property sets the current contact sensor object to perform operations on and remains persistent within a section. The value is a valid 2 character contact sensor ID in the form of <unit id><sensor id>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name:	<string, no space [0..32]>	V2.10
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Server Technology INI Configuration (STIC) File Format

This property sets the name of the currently selected contact sensor in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate contact sensor name or a reserved contact sensor ID. The value may be blank.

email notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables email notifications for the currently selected contact sensor in the section.

snmp trap notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables SNMP trap notifications for the currently selected contact sensor in the section.

[cord] V2.10

This section defines specific cord settings for the PDU. This section is readable only if cords are present.

id:	<cord id string [2]>	V2.10
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This property sets the current cord object to perform operations on and remains persistent within a section. The value is a valid 2 character cord ID in the form of <unit id><cord id>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name:	<string, no space [0..32]>	V2.10
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This property sets the name of the currently selected cord in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate cord name or a reserved cord ID. The value may be blank.

3-phase out-of-balance thresholds:	<csv threshold list>	V2.11
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This property sets the 3-phase out-of-balance threshold list for the currently selected cord. The value is a comma separated current threshold list in the format <high warning>,<high alarm>. Each value is an integer that ranges from 0 to 200 (percent). Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if 3-phase AC cord current sensing is present.

apparent power thresholds:	<csv threshold list>	V2.11
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Server Technology INI Configuration (STIC) File Format

This property sets the apparent power threshold list for the currently selected cord. The value is a comma separated current threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer that ranges from 0 to the maximum rated cord apparent power (VA). Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if AC cord power sensing is present.

current capacity: <integer, 1 to max cord capacity> V2.11

This property sets the capacity for the currently selected cord in the section in order to compute threshold limits. The value is an integer that ranges from 1 to the maximum rated cord (Amp) capacity. The maximum capacity is unit specific and varies between models.

email notifications: disabled V2.11
enabled V2.11

This property enables or disables email notifications for the currently selected cord in the section.

nominal power factor: <float, 0.00 to 1.00> V2.11

This property sets the nominal power factor for the currently selected cord for legacy AC TRMS units to tune estimated power calculations. The value is a floating point number that ranges from 0.00 to 1.00 in hundredth increments. This property is available only if AC TRMS load sensing is present.

nominal voltage: <integer, min to max cord voltage> V2.11

This property sets the nominal voltage for the currently selected cord in the section in order to compute threshold limits. The value is an integer that ranges from the minimum rated cord voltage to the maximum rated cord voltage (Volts). These limits are unit specific and vary between models.

power factor thresholds: <csv threshold list> V2.11

This property sets the power factor threshold list for the currently selected cord. The value is a comma separated current threshold list in the format <low alarm>,<low warning>. Each value is a floating point value that ranges from 0.00 to 1.00 in hundredth increments. Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if AC cord power sensing is present.

power thresholds: <csv threshold list> V2.11

Server Technology INI Configuration (STIC) File Format

This property sets the power threshold list for the currently selected cord. The value is a comma separated current threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer that ranges from 0 to the maximum rated cord power (Watts). Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if cord power sensing is present.

snmp trap notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables SNMP trap notifications for the currently selected cord in the section.

[cord global]	V2.11
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This section defines global cord settings for the PDU. This section is readable only if cords are present.

3-phase out-of-balance hysteresis:	<integer, 0 to 200>	V2.11
---	----------------------------------	-------

This property sets the global cord current hysteresis. The value is an integer that ranges from 0 to 200 (percent). This property is available only if 3-phase AC cord current sensing is present.

apparent power hysteresis:	<integer, 0 to 1000>	V2.11
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This property sets the global cord apparent power hysteresis. The value is an integer that ranges from 0 to 1000 (VA). This property is available only if AC cord power sensing is present.

power factor hysteresis:	<float, 0.00 to 1.00>	V2.11
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This property sets the global cord power factor hysteresis. The value is floating point and ranges from 0.00 to 1.00 in hundredth increments. This property is available only if AC cord power sensing is present.

power hysteresis:	<integer, 0 to 1000>	V2.11
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This property sets the global cord power hysteresis. The value is an integer that ranges from 0 to 1000 (Watts). This property is available only if cord power sensing is present.

[data trending]	V2.11
------------------------	-------

This section defines data trending options for the PDU.

Server Technology INI Configuration (STIC) File Format

feature:	disabled	V2.11
	enabled	V2.11

This property enables or disables data trending.

[email]		V2.00
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This section defines email and Simple Mail transport Protocol (SMTP) settings for the PDU.

from address:	<string [0..48]>	V2.00
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This property sets the email from address. The value is a valid string from 0 to 48 characters.

log authentication messages:	disabled	V2.00
	enabled	V2.00

This property enables or disables authentication log messages when email notifications are enabled.

log configuration messages:	disabled	V2.00
	enabled	V2.00

This property enables or disables configuration log messages when email notifications are enabled.

log event messages:	disabled	V2.00
	enabled	V2.00

This property enables or disables event log messages when email notifications are enabled.

log power messages:	disabled	V2.00
	enabled	V2.00

This property enables or disables power change log messages when email notifications are enabled.

notifications:	disabled	V2.00
	enabled	V2.00

This property enables or disables log message notifications.

primary to address:	<string [0..48]>	V2.00
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Server Technology INI Configuration (STIC) File Format

This property sets the email 'primary to' address. The value is a valid string from 0 to 48 characters.

secondary to address: <string [0..48]> V2.00

This property sets the email 'secondary to' address. The value is a valid string from 0 to 48 characters.

smtp authentication method: any V2.00
cram-md5 V2.00
digest-md5 V2.00
login V2.00
plain V2.00
none V2.00

This property sets the SMTP authentication method.

smtp authenticate with: from address V2.00
username V2.00

This property sets the user string SMTP will authenticate with.

smtp host: <string [0..63], no space> V2.00

This property sets the SMTP server host name. The value is a valid host name from 0 to 63 characters.

smtp password: <string [0..32]> (WO) V2.00
smtp password secure: <hex [0 or 64]> V2.00

These properties set the SMTP server password. The plain text version is a **Write-Only** property whose value is a string from 0 to 32 characters that may require encapsulated quotes. The "secure" version is either a blank (empty) or 64 character AES256 encrypted hex string that can be read and re-written to other units.

smtp port: <integer, 1 to 65535> V2.00

This property sets the SMTP server port. The value is an integer that ranges from 1 to 65535.

smtp username: <string [0..32]], no space> V2.00

This property sets the SMTP server username. The value is a string from 0 to 32 characters and may require encapsulated quotes.

Server Technology INI Configuration (STIC) File Format

subject id:	location	V2.00
	system id	V2.00

This property sets what unique system identification string is used in the email subject.

trend file attachments:	disabled	V2.11
	enabled	V2.11

This property enables or disables trend file attachments when email notifications are enabled.

[fan sensor]	V2.13
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This section defines specific fan sensor settings for the PDU. This section is readable only if fan sensors are present.

id:	<fan sensor id string [2]>	V2.13
------------	---	-------

This property sets the current fan sensor object to perform operations on and remains persistent within a section. The value is a valid 2 character fan sensor ID in the form of <unit id><sensor id>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name:	<string, no space [0..32]>	V2.13
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This property sets the name of the currently selected fan sensor in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate fan sensor name or a reserved fan sensor ID. The value may be blank.

email notifications:	disabled	V2.13
	enabled	V2.13

This property enables or disables email notifications for the currently selected fan sensor in the section.

thresholds:	<csv threshold list>	V2.13
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This property sets the threshold list for the currently selected fan sensor. The value is a comma separated fan threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer level that ranges from 0 to 15300 (Rotations Per Minute). Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms.

Server Technology INI Configuration (STIC) File Format

These properties set the FTP client update password. The plain text version is a **Write-Only** property whose value is a string from 0 to 32 characters that may require encapsulated quotes. The "secure" version is either a blank (empty) or 64 character AES256 encrypted hex string that can be read and re-written to other units.

client update scheduled day:	sunday	V2.00
	monday	V2.00
	tuesday	V2.00
	wednesday	V2.00
	thursday	V2.00
	friday	V2.00
	saturday	V2.00
	everyday	V2.00

This property sets the FTP client update scheduled day.

client update scheduled hour:	12 am	V2.00
	1 am	V2.00
	2 am	V2.00
	3 am	V2.00
	4 am	V2.00
	5 am	V2.00
	6 am	V2.00
	7 am	V2.00
	8 am	V2.00
	9 am	V2.00
	10 am	V2.00
	11 am	V2.00
	12 pm	V2.00
	1 pm	V2.00
	2 pm	V2.00
	3 pm	V2.00
	4 pm	V2.00
	5 pm	V2.00
	6 pm	V2.00
	7 pm	V2.00
	8 pm	V2.00
	9 pm	V2.00
	10 pm	V2.00
	11 pm	V2.00

This property sets the FTP client update scheduled hour.

client update username:	<string [0..32]>	V2.00
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Server Technology INI Configuration (STIC) File Format

This property sets the FTP client update user name. The value is a string from 0 to 32 characters and may require encapsulated quotes.

server:	disabled	V2.00
	enabled	V2.00

This property enables or disables the FTP server. A change to this property requires a restart.

[group] V2.10

This section manages group outlet access lists for the PDU.

name:	<string [1..32]>	V2.10
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This property initializes the current valid group name. The value is a string from 1 to 32 characters and may require encapsulated quotes. Creating a duplicate group is not permitted

outlet access list:	<csv outlet id list>	V2.10
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This **special repetitive** property sets the outlet ID access list for the currently defined group. The value is a comma separated list of outlet ID's up to the maximum STIC line length. Preceding, trailing or duplicate commas are not permitted. If "ALL" is specified then all defined outlet ID's will be added to the currently defined user. If this property is blank then no outlet access will be assigned. Multiple lines accumulate until the action command is encountered.

action:	create	V2.10
	delete	V2.10
	modify	V2.10
	update	V2.10

This property commits all currently-defined group settings in the section. The **name** property must be defined before specifying this property. After the action has occurred, all currently-defined group settings in the section will be reset.

- **create** – create new group (group must not exist).
- **delete** – delete group.
- **modify** – make changes to an existing group (group must exist).
- **update** – modify existing group or create if group does not exist.

[humidity sensor] V2.10

This section defines specific humidity sensor settings for the PDU. This section is readable only if humidity sensors are present.

Server Technology INI Configuration (STIC) File Format

id: <humidity sensor id string [2]> V2.10

This property sets the current humidity sensor object to perform operations on and remains persistent within a section. The value is a valid 2 character humidity sensor ID in the form of <unit id><sensor id>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name: <string, no space [0..32]> V2.10

This property sets the name of the currently selected humidity sensor in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate humidity sensor name or a reserved humidity sensor ID. The value may be blank.

email notifications: disabled V2.11
enabled V2.11

This property enables or disables email notifications for the currently selected humidity sensor in the section.

thresholds: <csv threshold list> V2.11

This property sets the threshold list for the currently selected humidity sensor. The value is a comma separated humidity threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer level that ranges from 0 to 100 (% Relative Humidity). Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms.

snmp trap notifications: disabled V2.11
enabled V2.11

This property enables or disables SNMP trap notifications for the currently selected humidity sensor in the section.

[humidity sensor global] V2.11

This section defines global humidity sensor settings for the PDU. This section is readable only if humidity sensors are present.

hysteresis: <integer, 0 to 20> V2.11

This property sets the global humidity sensor hysteresis. The value is an integer that ranges from 0 to 20 (% Relative Humidity).

Server Technology INI Configuration (STIC) File Format

[ldap] V2.10

This section defines all LDAP network configuration settings for the PDU.

bind type: **md5** V2.10
 simple V2.10
 tls V2.10

This property sets the LDAP bind type.

group membership attribute: <string [0..30]> V2.10

This property sets the LDAP group membership attribute. The value is a valid string from 0 to 30 characters.

group search: **disabled** V2.10
 enabled V2.10

This property enables LDAP user group searches.

group search base distinguished name: <string [0..100]> V2.10

This property sets the LDAP group search base distinguished name. The value is a valid string from 0 to 100 characters.

port: <integer, 1 to 65535> V2.10

This property sets the LDAP port number. The value is an integer that ranges from 1 to 65535.

primary host: <string [0..63], no space> V2.10

This property sets the primary LDAP host name. The value is a valid host name from 0 to 63 characters.

search bind distinguished name: <string [0..124]> V2.10

This property sets the LDAP search bind distinguished name. The value is a valid string from 0 to 124 characters.

search bind password: <string [0..32]> (WO) V2.10
search bind password secure: <hex [0 or 64]> V2.10

Server Technology INI Configuration (STIC) File Format

These properties set the LDAP search bind password. The plain text version is a **Write-Only** property whose value is a string from 0 to 32 characters that may require encapsulated quotes “secure” version is a 64 character AES256 encrypted hex string that can be read and re-written to other units.

Note: The plain text **Write-Only** LDAP search bind password was formerly 0 to 20 characters prior to STIC V2.15.

secondary host: <string [0..63], no space> V2.10

This property sets the secondary LDAP host name. The value is a valid host name from 0 to 63 characters.

user membership attribute: <string [0..61]> V2.10

This property sets the LDAP user membership attribute. The value is a valid string from 0 to 61 characters.

user search base distinguished name: <string [0..100]> V2.10

This property sets the LDAP user search base distinguished name. The value is a valid string from 0 to 100 characters.

user search filter: <string [0..100]> V2.10

This property sets the LDAP user search filter. The value is a valid string from 0 to 100 characters.

[line] V2.11

This section defines specific line settings for the PDU. This section is readable only if lines are present.

id: <line id string [3]> V2.11

This property sets the current line object to perform operations on and remains persistent within a section. The value is a valid 3 character line ID in the form of <unit id><cord id><line number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

current thresholds: <csv threshold list> V2.11

Server Technology INI Configuration (STIC) File Format

This property sets the current threshold list for the currently selected line. The value is a comma separated current threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is a floating point value that ranges from 0.0 to the maximum rated line current in tenth (Amp) increments. Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if line current sensing is present.

email notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables email notifications for the currently selected line in the section.

snmp trap notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables SNMP trap notifications for the currently selected line in the section.

[line global]	V2.11
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This section defines global line settings for the PDU. This section is readable only if lines are present.

current hysteresis:	<float, 0.0 to 10.0>	V2.11
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This property sets the global line current hysteresis. The value is an integer that ranges from 0.0 to 10.0 in tenth (Amp) increments. This property is available only if line current sensing is present.

[lldp]	V2.17
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This section defines Link Layer Discovery Protocol (LLDP) settings for the PDU.

feature:	disabled	V2.17
	enabled	V2.17

This property enables or disables LLDP advertising. A change to this property requires a restart.

transmit interval:	<integer, 5 to 32768>	V2.17
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This property sets the LLDP advertising time in seconds. The value is an integer that ranges from 5 to 32768.

Server Technology INI Configuration (STIC) File Format

[network]

V2.00

This section defines network settings for the PDU. Many of these settings are system specific.

dhcp:	disabled	V2.00
	enabled	V2.00

This property enables or disables DHCP. A change to this property requires a restart if the desired network mode is not disabled.

dhcp boot delay:	disabled	V2.00
	enabled	V2.00

This property, when enabled, tells the PDU to wait approximately 90 seconds to establish a connection through a DHCP server on startup. This allows various network interactions to succeed as the PDU powers up, such as generating SNMP startup traps or receiving SNTP time. Disabling this forces a fast boot around 5 seconds before attempting to turn on outlets. This is because the DHCP server itself may be connected to one of the PDU's outlets. If the DHCP server boot time is excessive, this option should be disabled.

dhcp fqdn:	disabled	V2.00
	enabled	V2.00

This property enables or disables DHCP Fully Qualified Domain Name (FQDN) for the system. A change to this property requires a restart if DHCP is desired.

dhcp fqdn name:	<string [0..63], no space>	V2.00
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This property sets the DHCP Fully Qualified Domain Name for the system. The value is a valid FQDN host name string from 0 to 63 characters. A change to this property requires a restart if DHCP is desired and FQDN is enabled.

dhcp static address fallback:	disabled	V2.00
	enabled	V2.00

This property, when enabled, tells the PDU to automatically fall back to a static address if a DHCP server does not respond within 90 seconds. Disabling this option will periodically make DHCP requests forever until the PDU obtains a dynamic address. A change to this property requires a restart if DHCP is desired.

network mode:	disabled	V2.00
	dual ipv6/ipv4	V2.00
	ipv4 only	V2.00
	ipv6 only	V2.20

Server Technology INI Configuration (STIC) File Format

This property sets the preferred network configuration mode. A change to this property requires a restart

static ipv4 address: < ipv4 string [7..15], no space> V2.00

This property sets the static IPv4 network address. The value is an IPv4 string from 7 to 15 characters. A change to this property requires a restart if static addresses are desired (DHCP disabled) or DHCP static fallback is enabled.

static ipv4 gateway: < ipv4 string [7..15], no space> V2.00

This property sets the static IPv4 gateway. The value is an IPv4 string up to 15 characters. A change to this property requires a restart if static addresses are desired (DHCP disabled) or DHCP static fallback is enabled.

static ipv4 subnet mask: <ipv4 string [7..15], no space> V2.00

This property sets the static IPv4 subnet mask. The value is an IPv4 string from 7 to 15 characters. A change to this property requires a restart if static addresses are desired (DHCP disabled) or DHCP static fallback is enabled

static ipv6 address: <ipv6 string [2..45], no space> V2.00

This property sets the static IPv6 network address. The value is a valid IPv4 or IPv6 (RFC4291) string from 2 to 45 characters. A change to this property requires a restart if static addresses are desired (DHCP disabled) or DHCP static fallback is enabled.

static ipv6 gateway: < ipv6 string [2..45], no space> V2.00

This property sets the static IPv6 gateway. The value is a valid IPv4 or IPv6 (RFC4291) string from 2 to 45 characters. A change to this property requires a restart if static addresses are desired (DHCP disabled) or DHCP static fallback is enabled.

static ipv6 prefix: <cidr string [1..4], no space> V2.00

This property sets the static IPv6 address prefix. The value can be an integer from 0 to 128 or as a standard CIDR string from /0 to /128. A change to this property requires a restart if static addresses are desired (DHCP disabled) or DHCP static fallback is enabled

static primary dns: <ipv4/ipv6 string [2..45], no space> V2.00

Server Technology INI Configuration (STIC) File Format

This property sets the primary IPv4/IPv6 DNS address. The value is a valid IPv4 or IPv6 (RFC4291) string from 2 to 45 characters.

static secondary dns: <ipv4/ipv6 string [2..45], no space> V2.00

This property sets the secondary IPv4/IPv6 DNS address. The value is a valid IPv4 or IPv6 (RFC4291) string from 2 to 45 characters.

zero touch provisioning: disabled V2.12
enabled V2.12

This property enables or disables zero touch provisioning via DHCP option 43 requests. A change to this property requires a restart if DHCP is desired.

[outlet] V2.10

This section defines specific outlet settings for the PDU. This section is readable only if outlets are present.

id: <outlet id string [3..5]> V2.10

This property sets the current outlet object to perform operations on and remains persistent within a section. The value is a valid 3 to 5 character outlet ID in the form of <unit id><cord id><outlet number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name: <string, no space [0..32]> V2.10

This property sets the name of the currently selected outlet in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate outlet group name, a duplicate outlet name or a reserved outlet ID. The value may be blank.

control lock: disabled V2.11
enabled V2.11

This property enables or disables user outlet control for the currently selected outlet in the section. Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

current thresholds: <csv threshold list> V2.11

Server Technology INI Configuration (STIC) File Format

This property sets the current threshold list for the currently selected outlet. The value is a comma separated current threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is a floating point value that ranges from 0.0 to the maximum rated outlet current in tenth (Amp) increments. Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if per outlet current sensing is available.

email notifications: **disabled** V2.11
 enabled V2.11

This property enables or disables email notifications for the currently selected outlet in the section.

extra on delay: **<integer, 0 to 900>** V2.11

This property sets the extra on delay for the currently selected outlet in the section. The value is an integer that ranges from 0 to 900 (seconds). Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

host: **<string, no space [0..63]>** V2.11

This property sets the shutdown host name of the currently selected outlet in the section. The value is a valid string with no spaces from 0 to 63 characters. Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

power factor thresholds: **<csv threshold list>** V2.11

This property sets the power factor threshold list for the currently selected outlet. The value is a comma separated current threshold list in the format <low alarm>,<low warning>, Each value is a floating point value that ranges from 0.00 to 1.00 in hundredth increments. Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if AC per outlet power sensing is available.

power thresholds: **<csv threshold list>** V2.11

This property sets the power threshold list for the currently selected outlet. The value is a comma separated current threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer that ranges from 0 to the maximum rated cord power (Watts). Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms. This property is available only if per outlet power sensing is available.

Server Technology INI Configuration (STIC) File Format

script delay: <integer, 1 to 15> V2.11

This property sets the script delay for the currently selected outlet in the section. The value is an integer that ranges from 1 to 15 (minutes). Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

script feature: disabled V2.11
enabled V2.11

This property enables or disables the outlet script feature for the currently selected outlet in the section. Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

shutdown delay: <integer, 30 to 900> V2.11

This property sets the shutdown delay for the currently selected outlet in the section. The value is an integer that ranges from 30 to 900 (seconds). Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

shutdown feature: disabled V2.11
enabled V2.11

This property enables or disables the outlet shutdown feature for the currently selected outlet in the section. Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

snmp trap notifications: disabled V2.11
enabled V2.11

This property enables or disables SNMP trap notifications for the currently selected outlet in the section.

socket adapter: none V2.16
C13 V2.16
C19 V2.16

This property sets the outlet socket adapter type for manually configured universal PDU's for the currently selected outlet in the section. This property is available only if the outlet has user configurable outlet adapter types and will be ignored if the feature is unavailable.

Server Technology INI Configuration (STIC) File Format

wakeup state:	last	V2.11
	off	V2.11
	on	V2.11

This property sets the outlet wakeup state currently selected outlet in the section. Any attempt to change this setting for a non-switched outlet will be ignored. This property is available only if the outlet can be switched.

[outlet global]	V2.11
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This section defines global outlet settings for the PDU. This section is readable only if outlets are present.

change logging:	disabled	V2.11
	enabled	V2.11

This property enables or disables outlet state change logging for all outlets. This property is available only if outlet switching is present.

current hysteresis:	<float, 0.0 to 10.0>	V2.11
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This property sets the global current hysteresis for all outlets. The value is floating point and ranges from 0.0 to 10.0 in tenth (Amp) increments. This property is available only if per outlet current sensing is available.

power factor hysteresis:	<float, 0.00 to 1.00>	V2.11
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This property sets the global power factor hysteresis for all outlets. The value is floating point and ranges from 0.00 to 1.00 in hundredth increments. This property is available only if AC per outlet power sensing is available.

power hysteresis:	<integer, 0 to 1000>	V2.11
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This property sets the global power hysteresis for all outlets. The value is an integer that ranges from 0 to 1000 (Watts). This property is available only if per outlet power sensing is available.

reboot delay:	<integer, 5 to 600>	V2.11
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This property sets the global reboot delay per outlet. The value is an integer that ranges from 5 to 600 (seconds). This property is available only if outlet switching is present.

sequence interval:	<integer, 0 to 15>	V2.11
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Server Technology INI Configuration (STIC) File Format

This property sets the global sequence interval delay between outlets. The value is an integer that ranges from 0 to 15 (seconds). This property is available only if outlet switching is present.

[over current protector] V2.11

This section defines specific over current protector settings for the PDU. This section is readable only if over current protectors are present.

id: <ocp id string [3..4]> V2.11

This property sets the current “over current protector” object to perform operations on and remains persistent within a section. The value is a valid 3 to 4 character over current protector ID in the form of <unit id><cord id><ocp number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

current capacity: <integer, 1 to max OCP capacity> V2.11

This property sets the capacity for the currently selected over current protector in the section in order to compute threshold limits. The value is an integer that ranges from 1 to the maximum rated over current protector (Amp) capacity. The maximum capacity is unit specific and varies between models.

email notifications: **disabled** V2.11
enabled V2.11

This property enables or disables email notifications for the currently selected over current protector in the section.

snmp trap notifications: **disabled** V2.11
enabled V2.11

This property enables or disables SNMP trap notifications for the currently selected over current protector in the section.

[phase] V2.11

This section defines specific phase settings for the PDU. This section is readable only if phases are present.

id: <phase id string [3]> V2.11

Server Technology INI Configuration (STIC) File Format

voltage hysteresis: <float, 0.0 to 20.0> V2.11

This property sets the global phase voltage hysteresis. The value is floating point and ranges from 0.0 to 20.0 in tenth (Volt) increments. This property is available only if phase voltage sensing is present.

[port] V2.11

This section defines specific port settings for the PDU. This section is readable only if ports are present.

id: <port id string [4]> V2.11

This property sets the current port object to perform operations on and remains persistent within a section. The value is a valid 4 character port ID in the form of **COM**<port number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

baud:

1200	V2.11
2400	V2.11
4800	V2.11
9600	V2.11
19200	V2.11
38400	V2.11
57600	V2.11
115200	V2.11

This property sets the baud rate for the currently selected port in the section if the port is unlocked. Any attempts to change this setting on a locked port will be ignored.

dsr check:

disabled	V2.11
enabled	V2.11

This property enables or disables DSR monitoring for the currently selected port in the section if the port is unlocked. Any attempts to change this setting on a locked port will be ignored.

remote connection timeout: <integer, 0 to 60> V2.11

This property sets the remote connection timeout for the currently selected port in the section if the port is unlocked. The value is an integer that ranges from 0 to 60 (minutes). Any attempts to change this setting on a locked port will be ignored.

Server Technology INI Configuration (STIC) File Format

This property sets the secondary Radius server port. The value is an integer that ranges from 1 to 65535.

secondary server retries: <integer, 0 to 10> V2.10

This property sets the secondary Radius server retries. The value is an integer that ranges from 0 to 10.

secondary server shared secret: <string [0..48]> (WO) V2.10
secondary server shared secret secure:<hex [0 or 96]> V2.10

These properties set the secondary Radius server shared secret. The plain text version is a **Write-Only** property whose value is a string from 0 to 48 characters that may require encapsulated quotes. The “secure” version is a 96 character AES256 encrypted hex string that can be read and re-written to other units.

secondary server timeout: <integer, 1 to 30> V2.10

This property sets the secondary Radius server retries. The value is an integer that ranges from 1 to 30 (seconds).

[snmp] V2.00

This section defines Simple Network Management Protocol (SNMP) settings for the PDU.

get community: <string [0..32]> V2.00

This property sets the SNMP GET community string. The value is a string from 0 to 32 characters.

ip restrictions: none V2.00
trap destinations only V2.00

This property sets the SNMP IP address restrictions.

set community: <string [0..32]> V2.00

This property sets the SNMP SET community string. The value is a string from 0 to 32 characters.

system contact: <string [0..63]> V2.00

This property sets the SNMP system contact string. The value is a string from 0 to 63 characters.

Server Technology INI Configuration (STIC) File Format

system name: <string [0..63]> V2.00

This property sets the SNMP system name string. The value is a string from 0 to 63 characters.

trap community: <string [0..32]> V2.00

This property sets the SNMP TRAP community string. The value is a string from 0 to 32 characters.

trap destination primary host: <string [0..63], no space> V2.00

This property sets the SNMP primary trap destination host name. The value is a valid host name from 0 to 63 characters.

trap destination secondary host: <string [0..63], no space> V2.00

This property sets the SNMP secondary trap destination host name. The value is a valid host name from 0 to 63 characters.

trap error repeat time: <integer, 1 to 65535> V2.00

This property sets the SMTP trap error repeat time in seconds. The value is an integer that ranges from 1 to 65535.

trap format: v1 V2.00
v2c V2.00
v3 V2.00

This property sets the SNMP trap format to send.

v2: disabled V2.00
enabled V2.00

This property enabled or disables SNMPv2 agent. A change to this property requires a restart.

v3: disabled V2.00
enabled V2.00

This property enabled or disables SNMPv3 agent. A change to this property requires a restart.

v3 trap username: <string [0..31]> V2.00

Server Technology INI Configuration (STIC) File Format

This property sets the SNMPv3 trap user name. The value is a string from 0 to 31 characters and should be encapsulated.

[snmpv3 user] V2.14

This section manages Simple Network Management Protocol(SNMPv3) user configuration for the PDU.

name: <string [0..31]> V2.14

This property initializes the current SNMPv3 user name. The value is a string from 0 to 31 characters and may require encapsulated quotes. Creating a duplicate SNMPv3 user is not permitted.

access: **disabled** V2.14
read-only V2.14
read-write V2.14
write-only V2.14

This property sets access method for the currently defined SNMPv3 user. A change to this property requires a restart.

auth method: **none** V2.14
md5 V2.14
md5 with des V2.14
md5 with aes V2.19
sha V2.19
sha with des V2.19
sha with aes V2.19

This property sets the authentication method for the currently defined SNMPv3 user. Any option with MD5 or SHA requires an associated user authentication password. Any option with DES or AES requires an associated user privacy password. A change to this property requires a restart.

auth password: <string [0..39]> (WO) V2.14
auth password secure: <hex [0 or 96]> V2.14

These properties set the authentication password method for the currently defined SNMPv3 user if the MD5 method is selected. The plain text version is a **Write-Only** property whose value is a string from 0 to 39 characters that may require encapsulated quotes. The “secure” version is either a blank (empty) or 96 character AES256 encrypted hex string that can be read and re-written to other units.

privacy password: <string [0..31]> (WO) V2.14

Server Technology INI Configuration (STIC) File Format

privacy password secure: <hex [0 or 64]> V2.14

These properties set the privacy password for the currently defined SNMPv3 user if the DES method is selected. The plain text version is a **Write-Only** property whose value is a string from 0 to 31 characters that may require encapsulated quotes. The “secure” version is either a blank (empty) or 64 character AES256 encrypted hex string that can be read and re-written to other units.

action:

create	V2.14
delete	V2.14
modify	V2.14
update	V2.14

This property commits all currently defined user settings in the section. An SNMPv3 user **name** property must be defined before specifying this property. After the action has occurred, all currently defined SNMPv3 user settings in the section will be reset.

- **create** – create new SNMPv3 user (user must not exist).
- **delete** – delete SNMPv3 user.
- **modify** – make changes to an existing SNMPv3 user (user must exist).
- **update** – modify existing SNMPv3 user or create if user does not exist.

[sntp] V2.00

This section defines Simple Network Time Protocol (SNTP) settings for the PDU including Daylight Saving Time (DST) and Time Zone (TZ) strings.

dst:

disabled	V2.00
enabled	V2.00

This property enables or disables Daylight Saving Time.

dst end time zone string: <time zone string [11..15]> V2.00

This property sets DST end TZ string. The value is a string from 11 to 15 characters in the format: “**m.w.d/h:m:s**” where the first **m** is the end month (1-12), **w** is the end week (1-4) or last week (5), **d** is the end weekday from Sunday to Saturday (0-6), **h** is the end hour (0-23), the last **m** is the end minute (0-59) and **s** is the end second (**0-59**).

dst start time zone string: <time zone string [11..15]> V2.00

Server Technology INI Configuration (STIC) File Format

This property sets DST start TZ string. The value is a string from 11 to 15 characters in the format: "m.w.d/h:m:s" where the first m is the end month (1-12), w is the end week (1-4) or last week (5), d is the end weekday from Sunday to Saturday (0-6), h is the end hour (0-23), the last m is the end minute (0-59) and s is the end second (0-59).

local gmt offset: <gmt offset string, [1..6]> V2.00

This property sets the local GMT offset. The value is a gmt offset string that ranges from -12:59 to +14:59. The '+' sign is optional. If the exact hour is being specified then ':MM' minutes are also optional.

primary host: <string [0..63], no space> V2.00

This property sets the SNTP primary host name. The value is a valid host name from 0 to 63 characters.

secondary host: <string [0..63], no space> V2.00

This property sets the SNTP secondary host name. The value is a valid host name from 0 to 63 characters.

[syslog] V2.00

This section defines syslog protocol settings for the PDU.

debug messaging: disabled V2.11
enabled V2.11

This property enables or disables sending debug messages to the syslog server.

hostname source: fqdn V2.18
system name V2.18

This property sets the syslog hostname source string to either the default system name or network fqdn string. If rfc3164 protocol is specified with FQDN as the source, the hostname will be clipped to the first "." separator if one is present.

port: <integer, 1 to 65535> V2.00

This property sets the syslog host port. The value is an integer that ranges from 1 to 65535.

primary host: <string [0..63], no space> V2.00

Server Technology INI Configuration (STIC) File Format

secondary host: <string [0..63], no space> V2.10

This property sets the TACACS+ secondary host name. The value is a valid host name from 0 to 63 characters.

[temperature sensor] V2.10

This section defines specific temperature sensor settings for the PDU. This section is readable only if temperature sensors are present.

id: <temperature sensor id string [2]> V2.10

This property sets the current temperature sensor object to perform operations on and remains persistent within a section. The value is a valid 2 character temperature sensor ID in the form of <unit id><sensor number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name: <string, no space [0..32]> V2.10

This property sets the name of the currently selected temperature sensor in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate temperature sensor name or a reserved temperature sensor ID. The value may be blank.

email notifications: **disabled** V2.11
enabled V2.11

This property enables or disables email notifications for the currently selected temperature sensor in the section.

snmp trap notifications: **disabled** V2.11
enabled V2.11

This property enables or disables SNMP trap notifications for the currently selected temperature sensor in the section.

thresholds celsius: <csv threshold list, Celsius> V2.11
thresholds fahrenheit: <csv threshold list, Fahrenheit> V2.11

Server Technology INI Configuration (STIC) File Format

These properties set the threshold list for the currently selected temperature sensor in Fahrenheit or Celsius. The value is a comma separated current threshold list in the format <low alarm>,<low warning>,<high warning>,<high alarm>. Each value is an integer that ranges from the minimum rated temperature to the maximum rated temperature (degrees F or C) depending on the temperature scale that was specified. Values must be specified in increasing order and may repeat or be pegged to limits in order to disable specific warnings and alarms.

[temperature sensor global]

V2.11

This section defines global temperature sensor settings for the PDU. This section is readable only if temperature sensors are present.

hysteresis celsius: <integer, 0 to 30> V2.11

hysteresis fahrenheit: <integer, 0 to 54> V2.11

These properties set the global temperature sensor hysteresis in Fahrenheit or Celsius. The value is an integer that ranges from 0 to 20 (degrees F) if “fahrenheit” is specified and 0 to 30 (degrees C) if “celsius” is specified.

scale: celsius V2.11

fahrenheit V2.11

This property sets the displayed temperature scale in Fahrenheit or Celsius.

[unit]

V2.10

This section defines specific unit settings for the PDU.

id: <unit id string [1]> V2.10

This property sets the current unit object to perform operations on and remains persistent within a section. The value is a valid 1 character unit ID in the form of <unit id>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name: <string, no space [0..32]> V2.10

This property sets the name of the currently selected unit in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate unit name or a reserved unit ID. The value may be blank.

asset tag: <string, [0..32]> V2.11

Server Technology INI Configuration (STIC) File Format

This property sets the asset tag of the currently selected unit in the section. The value is a valid string from 0 to 32 characters. Any attempt to change this setting on a legacy unit that does not support asset tags will be ignored.

display orientation:	auto	V2.11
	inverted	V2.11
	normal	V2.11

This property sets the display orientation for the currently selected unit in the section. Any attempt to change this setting on device that does not have display support or does not support a particular display option will be ignored.

email notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables email notifications for the currently selected unit in the section.

outlet display order:	normal	V2.13
	reversed	V2.13

This property sets the outlet display order in the WEB and CLI for the currently selected unit in the section. Any attempt to change this setting on device that does not have sequential switched outlets will be ignored.

outlet sequence:	normal	V2.11
	reversed	V2.11

This property sets the outlet sequence order for the currently selected unit in the section. Any attempt to change this setting on device that does not have switched outlets will be ignored.

snmp trap notifications:	disabled	V2.11
	enabled	V2.11

This property enables or disables SNMP trap notifications for the currently selected unit in the section.

[user]	V2.00
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This section manages user configuration for the PDU.

ldap group name:	<string [1..32]>	V2.10
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This property initializes the current valid LDAP group name to perform operations on. The value is a string from 1 to 32 characters and may require encapsulated quotes. Creating a duplicate LDAP group is not permitted

tacacs privilege level: <integer, 0..15> V2.10

This property initializes the current valid TACACS+ privilege level to perform operations on. The value is an integer that ranges from 0 to 15. Creating or deleting TACACS+ privilege levels is not permitted.

username: <string [1..32]> V2.00

This property initializes the current valid local username to perform operations on. The value is a string from 1 to 32 characters and may require encapsulated quotes. Creating a duplicate local user is not permitted

access level:

admin	V2.10
on only	V2.10
power user	V2.10
reboot only	V2.10
user	V2.10
view only	V2.10

This property sets the access level for the currently defined user. The default access level is “user” if not specified.

group access list: <csv list, no space> V2.10

This **special repetitive** property sets the outlet group access list for the currently defined user. The value is a comma separated list of existing outlet group names up to the maximum STIC line length. Preceding, trailing or duplicate commas are not permitted. If “ALL” is specified then all defined outlet groups will be added to the currently defined user. If this property is blank then no outlet group access will be assigned. Multiple lines accumulate until the action command is encountered.

outlet access list: <csv outlet id list> V2.10

This **special repetitive** property sets the outlet ID access list for the currently defined user. The value is a comma separated list of outlet ID's up to the maximum STIC line length. Preceding, trailing or duplicate commas are not permitted. If “ALL” is specified then all defined outlet ID's will be added to the currently defined user. If this property is blank then no outlet access will be assigned. Multiple lines accumulate until the action command is encountered.

password: <string [1..32]> (WO) V2.00

Server Technology INI Configuration (STIC) File Format

password secure: <hex [64]> V2.00

These properties set the local user password for the currently defined user. The plain text version is a **Write-Only** property whose value is a string from 1 to 32 characters that may require encapsulated quotes. The “secure” version is a 64 character SHA256 hashed hex string that can be read and re-written to other units. This only applies to local users as specified by the **username** property

remote port access list: <csv port id list> V2.10

This property sets the remote port access list for the currently defined user. The value is a comma separated list of existing port ID’s up to the maximum STIC line length. Preceding, trailing or duplicate commas are not permitted. If “ALL” is specified then all defined remote ports will be added to the currently defined user. If this property is blank then no remote port access will be assigned.

system monitor access: **disabled** V2.10
enabled V2.10

This property enables or disables system monitor access for the currently defined user.

action: **create** V2.10
delete V2.10
modify V2.00
update V2.10

This property commits all currently defined user settings in the section. A **username**, **ldap group name** or **tacacs privilege level** property must be defined before specifying this property. After the action has occurred, all currently defined user settings in the section will be reset.

- **create** – create new user (user must not exist).
- **delete** – delete user.
- **modify** – make changes to an existing user (user must exist).
- **update** – modify existing user or create if user does not exist.

[water sensor] V2.10

This section defines specific water sensor settings for the PDU. This section is readable only if water sensors are present.

id: <water sensor id string [2]> V2.10

Server Technology INI Configuration (STIC) File Format

This property sets the current water sensor object to perform operations on and remains persistent within a section. The value is a valid 2 character water sensor ID in the form of <unit id><sensor number>. The ID property must be defined before setting any other object dependent property and may be redefined as needed.

name: <string, no space [0..32]> V2.10

This property sets the name of the currently selected water sensor in the section. The value is a valid string with no spaces from 0 to 32 characters. The value cannot be ALL, a duplicate water sensor name or a reserved water sensor ID. The value may be blank.

email notifications: disabled V2.11
enabled V2.11

This property enables or disables email notifications for the currently selected water sensor in the section.

snmp trap notifications: disabled V2.11
enabled V2.11

This property enables or disables SNMP trap notifications for the currently selected water sensor in the section.

[\[web\]](#) V2.00

This section defines web settings for the PDU, including HTTP and Secure Socket Layer (SSL) web servers.

ca certificate: disabled V2.20
enabled V2.20

This property enables or disables the user provided CA certificate. A change to this property requires a restart.

http: disabled V2.00
enabled V2.00

This property enables or disables the web server. A change to this property requires a restart.

http port: <integer, 1 to 65535> V2.00

This property sets the HTTP server port. The value is an integer that ranges from 1 to 65535. A change to this property requires a restart if HTTP is enabled.

Server Technology INI Configuration (STIC) File Format

https: **disabled** V2.00
enabled V2.00

This property enables or disables the SSL web server. A change to this property requires a restart.

https port: **<integer, 1 to 65535>** V2.00

This property sets the SSL web server port. The value is an integer that ranges from 1 to 65535. A change to this property requires a restart if HTTPS is enabled.

log entries per page: **<integer, 10 to 250>** V2.11

This property sets the number of log messages displayed in a web page. The value is an integer that ranges from 10 to 250 (entries).

server certificate: **disabled** V2.20
enabled V2.20

This property enables or disables the user provided server identity certificate. A change to this property requires a restart.

server certificate passphrase: **<string [0..64]>** (WO) V2.20
server certificate passphrase secure: **<hex [128]>** V2.20

These properties set the passphrase for the user uploaded server certificate key. The plain text version is a **Write-Only** property whose value is a string from 0 to 64 characters that may require encapsulated quotes. The “secure” version is a 128 character SHA256 hashed hex string that can be read and re-written to other units if desired.

session timeout: **<integer, 1 to 1440>** V2.10

This property sets the idle WEB session time out. The value is an integer that ranges from 1 to 1440 (minutes).

json api web service: **disabled** V2.16
enabled V2.16

This property enables or disables the JSON API Web Service (JAWS).

[\[wlan\]](#) V2.10

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This section defines the Wireless Local Area Network settings for the PDU. This section is readable only if the PDU has a WLAN capable NIC card.

bssid: <MAC string [17] or blank> V2.10

This property locks a wireless access point to a specific BSSID. The value is a 17 character MAC string in the format <XX:XX:XX:XX:XX:XX> or blank if no BSSID locking is desired.

feature: disabled V2.10
enabled V2.10

This property enables or disables the Wireless Local Area Network hardware for WLAN capable NIC cards. Only the WLAN port is available when this property is enabled. Only the Ethernet port is available when this property is disabled. A change to this property requires a restart.

key: <string [0..63]> (WO) V2.10
key secure: <hex [0 or 128]> V2.10

These properties set the SSID for a wireless access point. The plain text version is a **Write-Only** property whose value is a string from 0 to 63 characters that may require encapsulated quotes. The “secure” version is a 128 character AES256 encrypted hex string that can be read and re-written to other units.

security: open V2.10
wep open key V2.10
wep shared key V2.10
wpa-psk aes V2.10
wpa-psk tkip V2.10
wpa-psk tkip+aes V2.10
wpa2-psk aes V2.10
wpa2-psk tkip V2.10
wpa2-psk tkip+aes V2.10

This property sets the security for a wireless access point.

ssid: <string [0..31]> V2.10

This property sets the SSID for a wireless access point. The value is a string from 0 to 32 characters and may require encapsulated quotes.

- [humidity sensor] thresholds
- [temperature sensor global] hysteresis celsius
- [temperature sensor global] hysteresis fahrenheit

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[ztp] V2.12

This section defines the Zero Touch Provisioning (ZTP) options for the PDU.

automatic updates: **disabled** V2.13
 enabled V2.13

This property enables or disables ZTP automatic updates.

state reset: **no** V2.12
 yes V2.12

This **Write-Only** property resets the Zero Touch Provisioning state so that a new DHCP option 43 request can be reissued on the next DHCP lease. This property is ignored when used in a ZTP request.

update scheduled day: **sunday** V2.13
 monday V2.13
 tuesday V2.13
 wednesday V2.13
 thursday V2.13
 friday V2.13
 saturday V2.13
 everyday V2.13

This property sets the ZTP update scheduled day.

update scheduled hour: **12 am** V2.13
 1 am V2.13
 2 am V2.13
 3 am V2.13
 4 am V2.13
 5 am V2.13
 6 am V2.13
 7 am V2.13
 8 am V2.13
 9 am V2.13
 10 am V2.13
 11 am V2.13
 12 pm V2.13
 1 pm V2.13
 2 pm V2.13
 3 pm V2.13
 4 pm V2.13
 5 pm V2.13
 6 pm V2.13

Server Technology INI Configuration (STIC) File Format

7 pm	V2.13
8 pm	V2.13
9 pm	V2.13
10 pm	V2.13
11 pm	V2.13

This property sets the ZTP update scheduled hour.

Server Technology INI Configuration (STIC) File Format

Revision History:

2021-Mar-26 STIC Protocol Release V2.21

- **DEPRECATED** the following fields: (2021-Mar-10)
 - [web] spm password reset
 - [web] spm secure access

- **DEPRECATED** the [bluetooth] section and all fields: (2021-Jan-05)
 - [bluetooth] discoverability
 - [bluetooth] feature
 - [bluetooth] name
 - [bluetooth] pin
 - [bluetooth] transmission power

- Deprecated items listed above been completely removed. Older STIC configuration templates containing these fields will continue to work. However, they will generate unknown property messages in the system log as a reminder. To optimize the configuration logs, we recommend removing these items from existing STIC configuration files. New PDU generated STIC files will no longer contain the [bluetooth] section or fields mentioned above.

2020-Jul-20 STIC Protocol Release V2.20

- Added the following read & write properties:
 - [web] ca certificate (2020-Jul-13)
 - [web] server certificate (2020-Jul-13)
 - [web] server certificate passphrase secure (2020-Jul-13)

- Added the following write only property:
 - [web] server certificate passphrase (2020-Jul-13)

- Expanded [system] “system location” size to 80 characters (2020-Jun-09)

- Expanded [network] “network mode” options to include:
 - ipv6 only (2020-Jun-08)

2020-Jun-01 STIC Protocol Release V2.19

- Expanded “[snmpv3 user] auth method” options to include:

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- md5 with aes (2020-May-06)
- sha
- sha with des
- sha with aes

2019-Dec-10 STIC Protocol Release V2.18

- Added password restricted security note.
- Moved "Section Property/Value Summary" near the top of this document.
- Moved "Revision History" to the end of this document.
- Added the following read & write properties:
 - [syslog] hostname source: (2019-Dec-06)

2019-Jul-02 STIC Protocol Release V2.17

- Added the following new section: (2019-Jan-22)
 - [lldp]
- Added the following read & write properties:
 - [lldp] feature (2019-Jan-22)
 - [lldp] transmit interval (2019-Jan-22)

2018-Jun-20 STIC Protocol Release V2.16

- Added the following read & write properties:
 - [outlet] socket_adapter (2018-Jun-20)
 - [web] json api web service (2017-Oct-04)

2018-Jan-03 STIC Protocol Release V2.15

- Changed the following write only property string length from 20 to 32 characters:
 - [ldap] search bind password (2017-Nov-13)

2017-Aug-25 STIC Protocol Release V2.14

- Added the following new section: (2017-May-11)
 - [snmpv3 user]

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- Added the following read & write properties: (2017-Aug-25)
 - [snmpv3 user] name
 - [snmpv3 user] access
 - [snmpv3 user] auth method
 - [snmpv3 user] auth password secure
 - [snmpv3 user] privacy password secure
 - [snmpv3 user] action
 - [outlet] socket adapter
- Added the following write only properties: (2017-Aug-25)
 - [snmpv3 user] auth password
 - [snmpv3 user] privacy password
- **DEPRECATED** the following [snmp] fields: (2017-Aug-25)
 - v3 read-only user auth method
 - v3 read-only user auth password
 - v3 read-only user auth password secure
 - v3 read-only user privacy password
 - v3 read-only user privacy password secure
 - v3 read-only username
 - v3 read-write user auth method
 - v3 read-write user auth password
 - v3 read-write user auth password secure
 - v3 read-write user privacy password
 - v3 read-write user privacy password secure
 - v3 read-write username

These commands still exist as **Write-Only** to maintain legacy script support. However, to utilize the new expanded SNMPv3 user additions, user management should be handled through the new [snmp3 user] section.

Mixing legacy commands with newer command can cause undesirable results so only use one of the two methods. It is recommended to adjust older scripts to utilize the new section rather than the previous legacy commands.

- Fixed AES decryption alignment. Though working legacy encrypted STIC data should still work, it is highly recommended to rebuild templates from a newer STIC V2.14 config.ini file or higher version.

2017-Jun-14

STIC Protocol Release

V2.13

- Added the following read & write properties:

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- [unit] outlet display order (2017-Mar-27)
- [port] rftag support (2017-Jan-26)
- [fan sensor] id (2017-May-11)
- [fan sensor] name (2017-May-11)
- [fan sensor] email notifications (2017-May-11)
- [fan sensor] snmp trap notifications (2017-May-11)
- [fan sensor] thresholds (2017-May-11)
- [fan sensor global] hysteresis (2017-May-11)
- [ztp] automatic updates (2017-May-26)
- [ztp] update scheduled day (2017-May-26)
- [ztp] update scheduled hour (2017-May-26)
- Added the following new sections: (2017-May-11)
 - [fan sensor]
 - [fan sensor global]

2017-Mar-08 STIC Protocol Release V2.12

- Added the following new section:
 - [ztp] (2017-Jan-26)
- Added the following write only property:
 - [ztp] state reset (2017-Jan-26)
- Added the following read & write property:
 - [net] zero touch provisioning (2017-Jan-26)
- Added the following read & write STI header control property:
 - [Server Technology INI Configuration] restart (2017-Jan-18)

2016-May-16 STIC Protocol Release V2.11

2016-Apr-05

- Setting “[access] local administrator account” to optional removes the restriction to delete the last local admin and forces “[access] configuration reset button” to be enabled to allow system recovery.
- Setting “[access] configuration reset button” to disabled forces “[access] local administrator account” to be required. If there are no local administrators accounts present then this is forced to enabled to allow system recovery.

Server Technology INI Configuration (STIC) File Format

2015-Aug-07

- Added indexed group, user and device information to config.ini
- Added PDU system log entry and line number for each successfully ignored property
- Added the following new sections:

[adc sensor global], [branch], [branch global], [cord global], [data trending], [humidity sensor global], [line], [line global], [outlet global], [over current protector], [phase], [phase global], [port], [temperature sensor global], [water sensor global]

- Added the following read & write properties:

- [access] default log order
- [adc sensor] email notifications
- [adc sensor] snmp trap notifications
- [adc sensor] thresholds
- [adc sensor global] hysteresis
- [branch] id
- [branch] current thresholds
- [branch] email notifications
- [branch] snmp trap notifications
- [branch global] current hysteresis
- [contact sensor] email notifications
- [contact sensor] snmp trap notifications
- [cord] 3-phase out-of-balance thresholds
- [cord] apparent power thresholds
- [cord] email notifications
- [cord] nominal power factor
- [cord] power thresholds
- [cord] power factor thresholds
- [cord] snmp trap notifications
- [cord global] 3-phase out-of-balance hysteresis
- [cord global] apparent power hysteresis
- [cord global] power factor hysteresis
- [cord global] power hysteresis
- [data trending] feature
- [email] trend file attachments
- [humidity sensor] email notifications
- [humidity sensor] snmp trap notifications
- [humidity sensor] thresholds
- [humidity sensor global] hysteresis

(2015-Oct-07)

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- [line] id
- [line] current thresholds
- [line] email notifications
- [line] snmp trap notifications
- [line global] current hysteresis
- [outlet] control lock
- [outlet] current thresholds
- [outlet] email notifications
- [outlet] extra on delay
- [outlet] host
- [outlet] power thresholds
- [outlet] power factor thresholds
- [outlet] script delay
- [outlet] script feature
- [outlet] shutdown delay
- [outlet] shutdown feature
- [outlet] snmp trap notifications
- [outlet] wakeup state
- [outlet global] change logging
- [outlet global] current hysteresis
- [outlet global] power factor hysteresis
- [outlet global] power hysteresis
- [outlet global] reboot delay
- [outlet global] sequence interval
- [over current protector] id
- [over current protector] email notifications
- [over current protector] snmp trap notifications
- [phase] id
- [phase] email notifications
- [phase] power factor thresholds
- [phase] snmp trap notifications
- [phase] voltage thresholds
- [phase global] power factor hysteresis
- [phase global] voltage hysteresis
- [port] id
- [port] baud
- [port] dsr check
- [port] remote connection timeout
- [syslog] debug messaging
- [temperature sensor] email notifications
- [temperature sensor] snmp trap notifications
- [temperature sensor] thresholds celsius
- [temperature sensor] thresholds fahrenheit
- [temperature sensor global] hysteresis celsius
- [temperature sensor global] hysteresis fahrenheit
- [temperature sensor global] scale

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- [unit] asset tag
 - [unit] display orientation
 - [unit] email notifications
 - [unit] outlet sequence
 - [unit] snmp trap notifications
 - [water sensor] email notifications
 - [water sensor] snmp trap notifications
 - [web] log entries per page
- Changed the following write only properties to read & write properties:
 - [adc sensor] id
 - [adc sensor] name
 - [contact sensor] id
 - [contact sensor] name
 - [cord] id
 - [cord] name
 - [group] name
 - [group] action
 - [humidity sensor] id
 - [humidity sensor] name
 - [outlet] id
 - [outlet] name
 - [temperature sensor] id
 - [temperature sensor] name
 - [unit] id
 - [unit] name
 - [user] ldap group name
 - [user] tacacs privilege level
 - [user] username
 - [user] access level
 - [user] password secure
 - [user] remote port access list
 - [user] system monitor access
 - [user] action
 - [water sensor] id
 - [water sensor] name
 - Changed the following special repetitive write only properties to read & write properties:
 - [group] outlet access list
 - [user] group access list
 - [user] outlet access list
 - Fixed [web] spm password reset to NOT reset when "no" specified

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- Fixed minimum length of [bluetooth] name from 0 to 1
- Improved validation checks & logging granularity

2015-Aug-06

STIC Protocol Release

V2.10

2015-Jul-01

- Added the following new sections:

[access], [adc sensor], [banner], [bluetooth], [contact sensor], [cord], [group], [humidity sensor], [ldap], [outlet], [radius], [tacacs], [temperature sensor], [unit], [water sensor] & [wlan]

- Added the following read & write properties:

- [access] access method
- [access] configuration reset button
- [access] startup stick
- [access] strong passwords
- [banner] action
- [bluetooth] discoverability
- [bluetooth] feature
- [bluetooth] name
- [bluetooth] pin
- [bluetooth] transmission power
- [cli] custom prompt
- [cli] session timeout
- [ldap] bind type
- [ldap] group membership attribute
- [ldap] group search
- [ldap] group search base distinguished name
- [ldap] port
- [ldap] primary host
- [ldap] secondary host
- [ldap] search bind distinguished name
- [ldap] search bind password secure
- [ldap] user membership attribute
- [ldap] user search base distinguished name
- [ldap] user search filter
- [radius] primary server
- [radius] primary server port
- [radius] primary server retries
- [radius] primary server shared secret secure
- [radius] primary server timeout

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- [radius] secondary server
 - [radius] secondary server port
 - [radius] secondary server retries
 - [radius] secondary server shared secret secure
 - [radius] secondary server timeout
 - [syslog] protocol
 - [tacacs] key secure
 - [tacacs] port
 - [tacacs] primary host
 - [tacacs] secondary host
 - [web] session timeout
 - [web] spm secure access
 - [wlan] bssid
 - [wlan] feature
 - [wlan] key secure
 - [wlan] security
 - [wlan] ssid
- Added the following special repetitive read & write property:
 - [banner] line
 - Added the following write only properties:
 - [adc sensor] id
 - [adc sensor] name
 - [contact sensor] id
 - [contact sensor] name
 - [cord] id
 - [cord] name
 - [group] action
 - [group] outlet access list
 - [group] name
 - [humidity sensor] id
 - [humidity sensor] name
 - [ldap] search bind password
 - [outlet] id
 - [outlet] name
 - [radius] primary server shared secret
 - [radius] secondary server shared secret
 - [tacacs] key
 - [temperature sensor] id
 - [temperature sensor] name
 - [unit] id
 - [unit] name
 - [user] access level

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- [user] group access list
 - [user] ldap group name
 - [user] outlet access list
 - [user] remote port access list
 - [user] system monitor access
 - [user] tacacs privilege level
 - [water sensor] id
 - [water sensor] name
 - [web] spm password reset
 - [wlan] key
- Added the following special repetitive write only properties:
 - [group] outlet access list
 - [user] group access list
 - [user] outlet access list
 - Expanded “[user] action” commands to include **create, delete & update**
 - Changed [wlan] section to be hidden when WLAN hardware is not supported

2015-May-21

STIC Protocol V2.00 release

V2.00

2015-Mar-13

- Added **config.ini** read for all STIC entries except the [user] section
- Added the following read & write properties:
 - [email] smtp password secure
 - [ftp] client update password secure
 - [snmp] v3 read-only user auth password secure
 - [snmp] v3 read-only user privacy password secure
 - [snmp] v3 read-write user auth password secure
 - [snmp] v3 read-write user privacy password secure
 - [user] password secure
- **Derived STIC V2.00 for PROx products from STIC V1.00 Protocol**