

Wandi-SSAL Capabilities	<i>Free</i>	<i>Base</i>	<i>On-Demand</i>
Simple and Robust APIs			
LoggerStartUp() starts the logger. LoggerAppMsg() logs message using printf() format style. LoggerShutDown() stops the logger.	x	x	x
Fail safe APIs to minimize impact to applications.	x	x	x
Informational codes provide non-verbose execution behavior.	x	x	x
Analyzes and validates log message.	x	x	x
Encodes to reduce storage capacity and protects using confidentiality, integrity, and authenticity.			x
Dynamically Adjustable Parameters			
Number of format string specifiers types per log message.	1y	x	x
Different types of format string specifiers.	2y	x	x
Length for string arguments.	3y	x	x
Length for message format string specification.	4y	x	x
Subset of ASCII characters for format string specification and string argument.	5y	x	x
Number of severity id=value pairs and length of value string.	6y	x	x
Number of logical message grouping id=value pairs and length of value string.	7y	x	x
Number of unique format string specification.			x
Multiple sequential log files each with N messages per file.		x	x
One log file with all log messages.	x	x	x
Multiple users per installation.	8y	x	x
Multiple applications per installation.	9y	x	x
Generate selected log messages in development.		x	x
Generate selected log messages in production.		x	x
Generate all log messages in development and production.	x	x	x
Dynamically turn on/off logging during runtime execution.		x	x
Ability to change Adjustable Parameters.			x
Fault Prevention			
Invalid NULL, 0, -1 pointer for %s format string specifier.	x	x	x
String argument that is not properly NULL terminated.	x	x	x
Untrusted or malicious format string specifiers.	x	x	x
Ill-formed or non-standard format specifiers.	x	x	x
Cybersecurity			
Decompose and encode to protect arguments/value separately.			x
Encrypt for confidentiality.			x
Hash and sign for integrity.			x
Certificate for authenticity.			x
Separation of duties for logging and viewing log messages.			x
OpenSSL/TLS for secure communication.			x
Log file viewed by only authenticated users.			x
Log message protected before written to disk.			x

Reduce Storage			
Encode log messages to reduce RAM storage usage.			x
Encode log messages to reduce disk storage usage.			x
Remove duplicate log message format string specification.			x
Fixed size circular RAM queue for fast access and processing.			x
Output Log Message File			
Log message files are protected on disk.			x
Protected log message files are viewable using a browser command.			x
Log message file name includes date, timestamp, sequence number.	x	x	
Log message file name includes username, date, timestamp, sequence number.		x	x
Deployable Architectures			
Single processor secure deployment.			x
Multi-processor secure deployment.			x
Lightweight library for user application.	x	x	x
Single-processor unsecure deployment.	x	x	
Multi-processor unsecure deployment.	x	x	
AI Capabilities			
AI to support near real-time analysis of log messages.			x
AI to support on-demand reporting of log messages.			x
These adjustable parameters are fixed for the Free Version			
The Free version Adjustable Parameters are fixed as follows: 1y – Maximum number of format string specifiers types allowed per message is 6. 2y – Different types of supported format string specifiers are %s, %d, %f, %c, %x, %p. 3y – Maximum length for string %s argument is 64 characters. 4y – Maximum length format string specification is 256 characters. 5y – Fixed subset of ASCII characters allowed: upper/lower case alphanumeric, blank , \\\, %, \', \", and !#\$%&'()*+,-./:;<=>?@[^_{}~ } characters. 6y – Maximum number of severity levels is 4 and length of string value is 16 characters. 7y – Maximum number of logical message groups is 32 and length of string value is 16 characters. 8y – Only one user instance. 9y – Only one application instance.			