



BETA CERTIFICATION BLUEPRINT – VALID MARCH & APRIL 2026

F5 Certified Technology Specialist, BIG-IP LTM (F5-CTS, BIG-IP LTM)

ABOUT THE F5 CERTIFIED TECHNOLOGY SPECIALIST, BIG-IP LTM CERTIFICATION

The F5 Certified Technology Specialist, BIG-IP LTM certification is earned by passing these six exams, in any order:

BIG-IP LTM Specialist Base Configuration and Networking Setup

BIG-IP LTM Specialist Virtual Server and Local Traffic Configuration Objects

BIG-IP LTM Specialist iRules, Analytics and Templates

BIG-IP LTM Specialist Software Upgrades, HA Configuration, and Device Monitoring

BIG-IP LTM Specialist Packet Capture/Troubleshooting - TCP/UDP/Application Layer

BIG-IP LTM Specialist Packet Capture/Troubleshooting - TLS/SSL

Successful completion of the F5 Certified Technology Specialist, BIG-IP LTM exam series validates that an individual understands concepts from traffic management to BIG-IP configurations, and can apply the skills required to integrate LTM solutions into existing networks and new implementations. The individual is able to design, implement, maintain, optimize, and troubleshoot BIG-IP LTM product features to enhance the effectiveness of an application delivery network.

WHAT IS THE F5 CERTIFIED TECHNOLOGY SPECIALIST, LTM CERTIFICATION BLUEPRINT?

This blueprint provides a list of exams and objectives, as well as a breakdown of the skills and knowledge a candidate should have to pass each of the six exams required to earn the F5 Certified Technology Specialist, BIG-IP LTM credential. The objectives and examples can be used to identify areas for additional study, experience, and knowledge. The examples provided are illustrative, not exhaustive.

PREREQUISITE:

F5-CA, BIG-IP Certification

CREDENTIAL AWARDED:





Exam F5CTSLTM1-B: BIG-IP LTM Specialist Base Configuration and Networking Setup		
Topics and Examples		CC*
F5CTSLTM1.01	<p>Determine whether or not an application can be deployed with only the LTM module provisioned</p> <ul style="list-style-type: none"> • Identify the functionality of LTM configuration objects • Identify LTM profile settings to deploy an application • Determine capabilities of LTM configuration objects 	U/A
F5CTSLTM1.02	<p>Identify the difference between deployments (e.g., one arm, two arm, nPath/ Direct Server Return/DSR)</p> <ul style="list-style-type: none"> • Identify configuration objects needed for L2/L3 nPath/DSR routing • Determine how the IP address changes when using nPath/DSR • Determine how IP addresses change when using a full proxy deployment • Plan the network considerations for one arm and two arm deployments • Understand the importance of auto last-hop 	U/A
F5CTSLTM1.03	<p>Determine how to secure Self Ips</p> <ul style="list-style-type: none"> • Identify which administrative services need to be accessible • Identify which configurations objects are allowing accessibility • Identify which services must be enabled for HA availability between devices • Make use of port lockdown 	U/A
F5CTSLTM 1.04	<p>Determine how to perform basic device configuration</p> <ul style="list-style-type: none"> • Identify how to synch time/date amongst LTM devices • Determine how to limit administrative access to LTM device (GUI/CLI) • Identify how to restrict access to administrative partitions 	U/A
F5CTSLTM1.05	<p>Understand route domains</p> <ul style="list-style-type: none"> • Explain the functionality of route domains 	U/A
F5CTSLTM1.06	<p>Interpret log file messages and/or command line output to identify LTM device issues</p> <ul style="list-style-type: none"> • Interpret log file messages to identify LTM device configuration issues • Interpret the qkview heuristic results • Identify appropriate methods to troubleshoot protocols that support the platform (e.g. NTP, DNS, SNMP, SMTP, SSH, FTP, SYSLOG) • Identify license problems based on the log file messages and statistics 	U/A

* Cognitive Complexity Key: **R** = Remember, **A/E** = Analyze/Evaluate, **U/A** = Understand/Apply



Exam F5CTSLTM2-B: BIG-IP LTM Specialist Virtual Server and Local Traffic Configuration Objects		
Topics and Examples		CC*
F5CTSLTM2.01	Determine which configuration objects are necessary to deploy an application <ul style="list-style-type: none"> • Determine least amount of configuration objects needed to deploy application • Understand dependencies of configuration objects • Understand needed LTM profiles to deploy an application • Identify unnecessary configurations objects • Understand the differences between virtual servers and virtual addresses 	U/A
F5CTSLTM2.02	Choose correct profiles and settings to fit application requirements <ul style="list-style-type: none"> • Identify LTM profile settings to deploy OneConnect • Determine which profiles are needed to deploy an application • Compare and contrast different communication protocols (TCP, UDP, FastL4) • Compare performance impact of LTM profile settings 	U/A
F5CTSLTM2.03	Choose virtual server type and load balancing type to fit application requirements <ul style="list-style-type: none"> • Determine the difference between L2-L3 virtual servers • Compare and contrast standard and fastL4 virtual server types • Compare and contrast different load balancing methods • Identify different load balancing method use cases 	U/A
F5CTSLTM2.04	Determine how to architect and deploy multi-tier applications using LTM <ul style="list-style-type: none"> • Understand connection-based architecture and when/how to apply • SNAT/persistence/SSL settings in a multi-tiered environment • Identify which device handles specific configuration objects in a multi-tiered deployment 	U/A
F5CTSLTM2.05	Distinguish between packet-based versus connection-based load balancing <ul style="list-style-type: none"> • Demonstrate when to use packet-based load balancing • Demonstrate when to use connection-based load balancing 	U/A
F5CTSLTM2.06	Determine which configuration objects are necessary for applications that need the original client IP address <ul style="list-style-type: none"> • Determine when SNAT is required • Determine the required SNAT type • Identify functions of X-forwarded-for • Outline the steps needed to return the traffic to LTM without SNAT 	R
F5CTSLTM2.07	Identify the matching order of multiple virtual servers <ul style="list-style-type: none"> • Identify which virtual server would process particular traffic • Identify why the virtual server fails to receive traffic 	U/A

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F5CTSLTM2.08	Determine how to secure virtual servers <ul style="list-style-type: none"> Determine how to limit access to virtual servers Compare and contrast different virtual server types Identify LTM profiles setting to limit access to virtual server resources 	U/A
F5CTSLTM2.09	Determine how configuration changes affect existing and new connections <ul style="list-style-type: none"> Predict persistence for existing connections Calculate when changes will affect the connections Predict load balancing and persistence for new connections Determine the impact of virtual server configuration change on traffic 	U/A
F5CTSLTM2.10	Given a scenario, determine the appropriate profile setting modifications <ul style="list-style-type: none"> Given a scenario determine when an application would benefit from HTTP Compression and/or Web Acceleration profile depending on HTTP version Given a scenario of client or server-side buffer issues, packet loss, or congestion, select the appropriate TCP or UDP profile to correct the issue 	A/E
F5CTSLTM2.11	Given a sub-set of an LTM configuration, determine which objects to remove or consolidate to simplify the LTM configuration <ul style="list-style-type: none"> Evaluate which iRules can be replaced with a profile or policy setting Evaluate which host virtual servers would be better consolidated into a network virtual server or traffic 	A/E
F5CTSLTM2.12	Given a set of LTM device statistics, determine which objects to remove or consolidate to simplify the LTM configuration <ul style="list-style-type: none"> Identify redundant and/or unused objects Identify unnecessary monitoring Interpret configuration and performance statistics Describe the outcome of removing functions from the LTM device configuration 	U/A
F5CTSLTM2.13	Given a packet capture, identify monitor issues <ul style="list-style-type: none"> Explain how to capture and interpret monitor traffic using protocol analyzer Explain how to obtain needed input and output data to create the monitors 	U/A
F5CTSLTM2.14	Given a monitor issue, determine an appropriate solution <ul style="list-style-type: none"> Determine appropriate monitor and monitor timing based on application and server limitations Describe how to modify monitor settings to resolve monitor problems Describe when In-TMM monitoring should be applied 	U/A

Exam F5CTSLTM3-B: BIG-IP LTM Specialist iRules, Analytics and Templates

Topics		CC*
F5CTSLTM3.01	Given a basic iRule's functionality, determine the profiles and configuration options necessary to implement the iRule <ul style="list-style-type: none"> Determine what virtual server profile is necessary Determine when persistence profile is necessary 	U/A

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F5CTSLTM3.02	Describe how to deploy applications using templates <ul style="list-style-type: none"> Recognize how to modify an application deployed with an iApp Recognize how to modify an application deployed with FAST Identify objects created by a template 	R
F5CTSLTM3.03	Determine which iRule to use to resolve an application issue <ul style="list-style-type: none"> Determine which iRule events and commands to use Given a specific iRule event determine what commands are available 	U/A
F5CTSLTM3.04	Explain the functionality of a simple iRule <ul style="list-style-type: none"> Interpret information in iRule logs to determine the iRule and iRule events where they occurred Describe the results of iRule errors 	U/A
F5CTSLTM3.05	Given specific traffic and configuration containing a simple iRule determine the result of the iRule on the traffic <ul style="list-style-type: none"> Use an iRule to resolve application issues related to traffic steering and/or application data 	A/E
F5CTSLTM3.06	Interpret AVR and/or Telemetry on application behavior to identify performance issues or application attacks <ul style="list-style-type: none"> Explain how to modify profile settings using information from the AVR Explain how to use advanced filters to narrow output data from AVR Identify potential latency increases within an application 	U/A
F5CTSLTM3.07	Interpret AVR information to identify LTM device misconfiguration <ul style="list-style-type: none"> Explain how latency trends identify application tier bottlenecks Explain how to use AVR to trace application traffic 	U/A

Exam F5CTSLTM4-B: BIG-IP LTM Specialist Software Upgrades, HA Configuration, and Device Monitoring

Topics		CC*
F5CTSLTM4.01	Determine how to perform a software upgrade while maintaining application availability <ul style="list-style-type: none"> Identify proper steps to avoid downtime while upgrading LTM software Determine necessary steps for migrating LTM configuration to new hardware Understand implications of stopping BIG-IP services 	U/A
F5CTSLTM4.02	Determine how to configure a high availability group of LTM devices to fit the requirements <ul style="list-style-type: none"> Compare and contrast traffic groups vs HA groups Determine what prevented an expected failover Identify necessary components for network failover 	U/A
F5CTSLTM4.03	Explain the uses of user roles and administrative partitions <ul style="list-style-type: none"> Explain how to restrict access to LTM using user roles Discuss the benefits of administrative partitions Apply user roles to administrative partitions 	U/A

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F5CTSLTM4.04	Determine how to deploy or upgrade vCMP guests and how the resources are distributed <ul style="list-style-type: none"> • Explain the different vCMP guest deployment states • Discuss the relationship between CPU and memory on vCMP • Select which versions can run on a guest given host version • Understand the relationship of network configuration objects between vCMP hosts and vCMP guests 	U/A
F5CTSLTM4.05	Determine how to deploy or upgrade F5 OS Tenants and how the resources are distributed <ul style="list-style-type: none"> • Explain the different F5 OS Tenant deployment states • Discuss the relationship between CPU and memory on F5 OS • Select which versions can run on a guest given host version • Understand the relationship of network configuration objects between F5 OS hosts and F5 OS Tenants 	U/A
F5CTSLTM4.06	Given a scenario, determine the appropriate upgrade and recovery steps required to restore functionality and minimize application outages to LTM devices <ul style="list-style-type: none"> • Identify the appropriate methods for a clean install • Identify the TMSH sys software install options required to install a new version • Identify the steps required to upgrade the LTM device such as: license renewal, validation of upgrade path, review release notes, etc. • Identify how to copy a config to a previously installed boot location/slot • Identify valid rollback steps for a given upgrade scenario • Explain how to upgrade an LTM device from the GUI • Describe the effect of performing an upgrade in an environment with device groups and traffic groups • Explain how to perform an upgrade in a high availability group 	U/A
F5CTSLTM4.07	Describe the benefits of custom alerting within an LTM environment <ul style="list-style-type: none"> • Describe how to specify the OIDs for alerting • Explain how to log different levels of local traffic message logs • Explain how to trigger custom alerts for testing purposes 	U/A
F5CTSLTM4.08	Describe how to set up custom alerting for an LTM device <ul style="list-style-type: none"> • List and describe custom alerts: SNMP, email and Remote Syslog • Identify the location of custom alert configuration files • Identify the available levels for local traffic logging 	R
F5CTSLTM4.09	Identify the appropriate command to use to determine the cause of an LTM device problem <ul style="list-style-type: none"> • Identify platform problems based on the log file messages and statistics • Identify resource exhaustion problems based on the log file messages and statistics • Identify connectivity problems based on the log files • Determine the appropriate log file to examine to determine the cause of the problem 	U/A
F5CTSLTM4.10	Analyze performance data to identify a resource problem on an LTM device <ul style="list-style-type: none"> • Analyze performance data using Linux or TMSH commands and performance graphs to identify a resource problem on an LTM device • Explain how CPU and Memory work between the host OS and TMOS 	A/E

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F5CTSLTM4.11	Given a scenario, determine the cause of an LTM device failover <ul style="list-style-type: none"> • Explain the effect of network failover settings on the LTM device • Differentiate between unicast and multicast network failover modes • Identify the cause of failover using logs and statistics 	U/A
F5CTSLTM4.12	Given a scenario, determine the cause of loss of high availability and/or sync failure <ul style="list-style-type: none"> • Explain how the high availability concepts relate to one another • Explain the relationship between device trust and device groups • Identify the cause of config sync failures • Explain the relationship between traffic groups and LTM objects • Interpret log messages to determine the cause of high availability issues 	U/A

Exam F5CTSLTM5-B: BIG-IP LTM Specialist Packet Capture/Troubleshooting - TCP/UDP/Application Layer

Topics		CC*
F5CTSLTM5.01	Given a set of headers or packet captures, determine the root cause of an HTTP/HTTPS application problem <ul style="list-style-type: none"> • Explain how to interpret response codes • Explain the function of HTTP headers within different HTTP applications (Cookies, Cache Control, Vary, Content Type & Host) • Explain HTTP methods (GET, POST, etc.) • Explain how to decode POST data 	U/A
F5CTSLTM5.02	Given a scenario, determine which protocol analyzer tool and its options are required to resolve an application issue <ul style="list-style-type: none"> • Identify application issues based on a protocol analyzer trace • Explain how to follow a conversation from client-side and server-side packet captures • Identify the different causes of slow traffic (e.g., drops, RSTs, retransmits, ICMP errors, demotion from CMP) • Explain how SNAT and OneConnect effect protocol analyzer's packet captures 	U/A
F5CTSLTM5.03	Given a packet capture, and necessary supporting documentation, determine the root cause of an application problem <ul style="list-style-type: none"> • Analyze a tcpdump to identify application or configuration problems 	A/E
F5CTSLTM5.04	Given a packet capture, and necessary supporting documentation, determine a solution to an application problem <ul style="list-style-type: none"> • Analyze a tcpdump to identify application or configuration solution 	A/E

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Exam F5CTSLTM6-B: BIG-IP LTM Specialist Packet Capture/Troubleshooting - TLS/SSL

Topics		CC*
F5CTSLTM6.01	<p>Given a set of headers or packet captures, determine a solution to an HTTP/HTTPS application problem</p> <ul style="list-style-type: none"> Investigate the cause of a specific response code Investigate the cause of an SSLHandshake failure Predict the browser caching behavior when application data is received (headers and HTML) 	A/E
F5CTSLTM6.02	<p>Given a direct packet capture, a packet capture through the LTM device, and other relevant information, determine the root cause of an HTTP/HTTPS application problem</p> <ul style="list-style-type: none"> Investigate the cause of an SSLHandshake failure Given a failed HTTP request and LTM configuration data determine if the connection is failing due to the LTM configuration 	A/E
F5CTSLTM6.03	<p>Given a direct packet capture, a packet capture through the LTM device, and other relevant information, determine a solution to an HTTP/HTTPS application problem</p> <ul style="list-style-type: none"> Describe the process to resolve an SSLHandshake failure Given a failed HTTP request and LTM configuration data determine the LTM configuration remedy 	A/E
F5CTSLTM6.04	<p>Given a scenario, determine from where the protocol analyzer data should be collected</p> <ul style="list-style-type: none"> Explain how to decrypt SSL traffic for protocol analysis Choose the appropriate protocol analyzer for troubleshooting a given problem (e.g., Wireshark, tcpdump) Identify application issues based on a protocol analyzer packet capture 	U/A

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Cognitive Complexity Descriptions

Lower Order Thinking Skills



Higher Order Thinking Skills

Remember	Understand/Apply	Analyze/Evaluate	Create
Information retrieval	Knowledge transfer	Critical thinking and reasoning	Innovation or creative thinking
Rote memorization	Comprehension or ability to apply knowledge to a standard process	Determine how parts relate to whole or knowledge integration and application to new situations	Forming an original work product
Retrieve relevant knowledge from long-term memory	Construct meaning from information	Make judgments based on criteria	Combine or reorganize parts to form a new pattern or structure
E.g., recall, retrieve, recognize	E.g., interpret, classify, compare, explain, implement	E.g., troubleshoot, attribute, diagnose, critique	E.g., generate, plan, produce

Alpine Testing Solutions' suggested cognitive complexity levels and associated verb references consider multiple approaches to defining cognitive processing (e.g., Anderson et al., Webb, Bloom, Frisbie). Above material created with assistance from Alpine and distributed with Alpine's permission as an attachment to certification test



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